

書誌第 945 号
Pub. No. 945

水 路 部 報 告

第 15 卷

昭和 29~30 年 日本磁気測量

THE BULLETIN OF THE HYDROGRAPHIC OFFICE
VOLUME XV

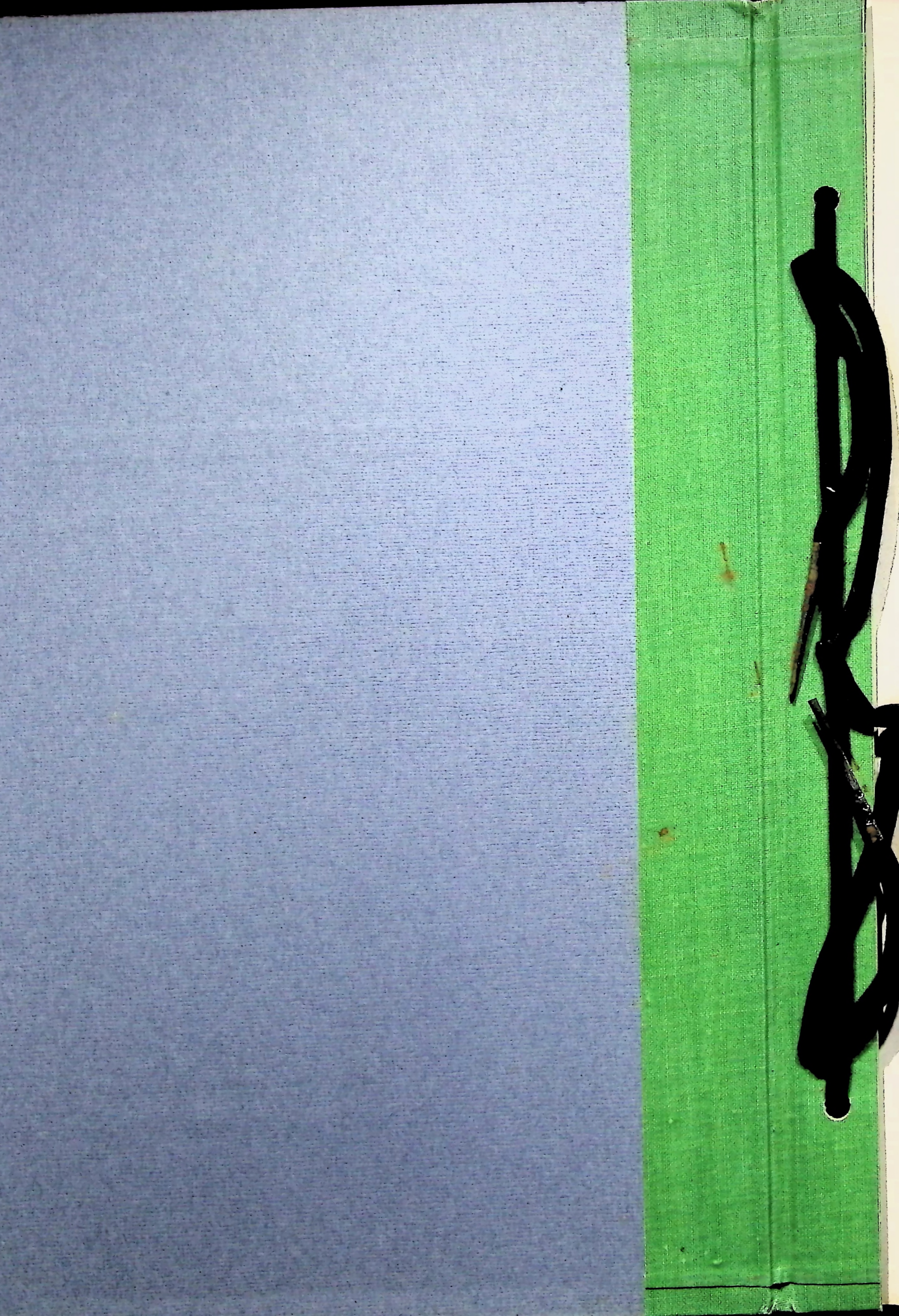
Magnetic Survey of Japan 1954—55

昭和 36 年 2 月 刊 行



海 上 保 安 庁

MARITIME SAFETY BOARD
TOKYO, JAPAN



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PREFACE

Since the first complete geomagnetic survey of Japan in 1912—13, the six surveys were made by Hydrographic Office at intervals of ten or five years. The results of these geomagnetic observations were given in each volume (that is, Vol. II, V, VIII, XII and XIV) of the "Bulletin of the Hydrographic Department", and were used to compile and publish the precise magnetic charts for navigation. This publication is the sixth of the reports on the periodical surveys.

The present survey was commenced in June 1954 and ended in December 1955. The observations were made at 133 stations in Japan. In this survey the following points were noticed: that is the first, the geomagnetic diurnal variation at each station was observed for the geomagnetic declination and horizontal intensity of the earth's field, and the second, the observation on some islands in the adjacent sea of Japan was made at two or more stations as these islands are geomagnetically very anomalous.

And moreover, the only one geomagnetic observatory belong to the Hydrographic Office was established at Simosato in February 1954. The instructive materials at the observatory were supplied for the construction of the magnetic charts.

I wish to express our sincere thanks to Dr. Y. Katō, Professor of the Tōhoku University, for his many valuable advices, and to Dr. R. Yoshimatsu, the Director of the Kakioka Magnetic Observatory, for his kindness in connection with the comparison of the magnetometers.

YŪSHIRŌ TSUKAMOTO

Chief Hydrographer,

Japanese Hydrographic Office

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**RESULTS OF MAGNETIC
OBSERVATIONS 1954-1955**

INTRODUCTION

The complete geomagnetic survey of the whole of Japan was carried out, at first, by Prof. Dr. A. Tanakadate and his cooperator during four years from 1887. After that, this geomagnetic survey was taken over by Japanese Hydrographic Office (belonged to the Imperial Navy in those days) and the first survey by the Office was made in 1912-1913.

Since then, the Office carried out three surveys in the interval of ten years, namely in 1922-1923, 1932-1933, and 1942-1943, until the II world war. After the war, this geomagnetic survey was prescribed to be carried out in the interval of five years according to the proposal of the International Hydrographic Bureau.

The results by these geomagnetic surveys are compiled to the geomagnetic chart and are published as the Bulletin of Hydrographic Office. On this Bulletin, the detail of complete geomagnetic survey which corresponds to the second survey after the world war, is described.

This was begun in June 1954 and completed in December 1955. During this period the survey was extended to all of Japan and the total number of occupied stations amounted to 133.

The chief charge of this survey took four persons and total was 18. In 1954, two field parties made the observation north of Kantō, namely in Hokkaido, Tōhoku and Kantō district. In 1955, two field parties made the observations west of Tyūbu, namely in Tyūbu, Kinki, Tyūgoku, Sikoku and Kyūsyū district.

The used magnetometers are of the "Nippon Suirobu" type. The detail of this magnetometer is described in the "Japanese Journal of Astronomy and Geophysics, Vol. VII No. 3, 1930" and has been used since the third survey.

For the purpose of obtaining the secular change of geomagnetic field in Japan and its neighbourhood, the Office had taken a permanent observatory at Katuura-tyō in Wakayama Prefecture, but removed to Simosato-tyō in the same Prefecture to expand and improve the equipments and facilities in February 1954. Since then, the geomagnetic observations at Simosato Magnetic Observatory have been continued.

The principal persons who had taken part in the final reductions,

in the constructions of magnetic charts and in the preparations of results for publication of this volume, are K. Sugiura and Y. Harada. Mr. B. Kawamura devoted many instructive suggestions for all kinds of official works.

THE STATIONS

The total of geomagnetic station in the present survey is 133 and the distribution of these stations is as shown in Fig. I.

The geomagnetic observations were as a rule made at the original stations.

However, the new station was established endeavouring to occupy the previous station as nearly as possible when the observations at the same stations became impossible or were threatened to be impossible for the sake of the introduction of railways and the growth of cities or towns.

The secular change in the geomagnetic field at such a station was obtained by some corrections that is decided by the geomagnetic observations at the new and old stations.

The distribution of the geomagnetic stations and their relative situation with respect to the original site are as shown in Table I. In the column of "Repeated station", the heading letter of sub-column in the table, A indicates that the old station was reoccupied exactly, B that the new station was established within 0.5 kilometer of the original one, and C that the new station was at a still greater distance from the old station. N indicates to the new station.

TABLE I. NUMBER OF THE MAGNETIC STATION AND ITS REGIONAL ASSORTMENT, 1954—1955

	Repeated Station				Total
	A	B	C	N	
Hokkaidō	6	6	6	4	22
Honsyū	21	12	8	22	63
Sikoku	1	0	3	3	7
Kyūsyū	4	3	12	4	23
Izu Islands	5	0	4	1	10
Nansei Islands	0	1	2	5	8
Total	37	22	35	39	133

30° -

Fig. I

Distribution of Magnetic Stations



At the end of this Bulletin the topographical sketches of the geomagnetic stations are shown for the convenience of the geomagnetic survey in future. Moreover, the stone posts for the survey were laid for the perpetuation of the geomagnetic station in the greater parts of the stations west of Tyūbu district.

ORGANIZATION OF THE SURVEY

The present geomagnetic survey was completed in a short period with the four observation parties. The member of each party and period of observation are shown in Table II.

TABLE II. SUMMARY SHOWING OF THE MAGNETIC SURVEY,
1954-1955

Year	Charge	Member		Station	Instru- ment
1954	S. Urai	T. Kusaka	H. Takabe	38 36 37 35 32 29 27 26 25 24 22	No. 21
			K. Sugiura	21 23 20 18 16 19 15 14 11 10 6 8 9	
			Y. Harada	70 72 74 75	
	K. Endō	K. Kumagai	T. Amemiya	1 2 3 4 5 7 12 13 17 28 30 31 33 34 43 44 47 55 64 76 54 46	No. 29
1955	B. Kawamura	S. Imai	Y. Harada	90 89 88 108 107 109	No. 21
		K. Simozi	U. Takigawa	41 42 45 51 39 40 48 53 58 59	
		S. Utasiro		56 65 60 61 49 50 52 63 68	
		U. Takigawa	M. Isizima	66 81 96 85 86 94 99 100 116 117 115 106 105 113 114	
		T. Amemiya	U. Takigawa	120 119 122 125 130 131 132 133	
	S. Imai	Y. Harada	T. Kaneko	78 57 77 73 62 71 79 84 93	No. 29
		K. Tukahara		95 67 69 80 83	
		A. Nakanisi		91 92 87 97 103 112 111 118 121 123 124 128 127 126 129 102 104 110 101 98 82	

The member of computers were as follows:—

K. Sugiura, Y. Harada, S. Sakazume, A. Nakanisi, K. Tukahara,
and T. Kaneko

INSTRUMENTS USED AND METHOD OF OBSERVATIONS

The "Nippon Suirobu" type magnetometers were used in the present geomagnetic survey. The practice of utilization of these magnetometers is as shown in Table II. And then, as the instrumental and technical descriptions of this magnetometer have been already given in the "Bulletin of Hydrographic Department, Vol. VIII, (1936)", they are omitted here.

All the magnetometers used were compared four times in this geomagnetic survey at the Kakioka Magnetic Observatory. The corrections of each magnetometer on the International Magnetic Standards were computed.

The comparison was carried out directly before the commencement of this survey, on June, 1954, the second and the third nearly in the middle on October, 1954 and May, 1955, and the fourth immediately after the completion of this survey, on December, 1955. The results of these observations are given in Table III. Recently, it was pronounced that Kakioka Magnetic Standard was corrected by the absolute observation with the proton precession magnetometer. However, these observed values in the present Bulletin and all of values obtained in the past magnetic survey should be corrected in future.

TABLE III. RESULTS OF THE COMPARISON AT KAKIOKA MAGNETIC OBSERVATORY

(a) Declination Corrections on Kakioka Magnetic Standard

Obs. + Corr. = K.M.S.

Inst. No.	Coil	Mag.	1954	1955
21A	A	A	1.4	1.5
		B	1.8	1.7
	B	A	1.0	1.4
		B	1.7	1.6
29	B	A	1.5	1.2
		B	2.1	2.0
	C	A	1.8	1.5
		B	2.1	2.4
		C	—	—0.5

Inst. No.	Coil	Mag.	1954	1955
21 C	B	A	—	0.7
		B	—	0.5
	C	A	—	1.5
		B	—	0.8
		C	—	0.3

(b) Dip Corrections on Kakioka Magnetic Standard

$$\text{Obs.} + \text{Corr.} = \text{K.M.S.}$$

Inst. No.	1954	1955
21 A	-1.3	-0.5
29	0.3	-0.1
21 C	—	-0.4

(c) Horizontal Intensity Corrections on K.M.S.

$$\text{Obs.} + \text{Corr.} = \text{K.M.S.}$$

Inst. No.	Coil	Mag.	Resist.	Cell	1954	1955
21 A	A	A	1	2	7	6
			2	2	6	3
		B	1	2	5	7
	B	B	1	2	7	3
		A	1	2	-4	-5
			2	2	-8	-7
29	C	B	1	2	-5	-3
			2	2	-8	-7
		C	1	2	—	1
21 B	B	A	1	2	—	11
		B	1	2	—	11
	C	A	1	2	—	-3
		B	1	2	—	-2
		C	1	2	—	-2

The observations of declination and horizontal intensity in geo-magnetic field were made each hour for 24—30 hours continuously. In the event of magnetic storm, the observations were continued until the normal features of daily magnetic change were obtained. The observations of mag-

netic dip were made 4—5 times a day about 5h 30m, 11h 30m, 17h 30m and 23h 30m o'clock.

These observed values are added to the instrumental correction and the vertical correction and shown in Table IV. Moreover the original results of magnetic observations are completely shown in Table X.

REMARKS ON RESULT OF MAGNETIC OBSERVATION

The values of magnetic elements contained in Table IV are daily means reduced from the results in Table X. Moreover, these values are, as above-mentioned, reduced to the Kakioka Magnetic Standard and added to the vertical correction. However, it is determined, for dip, by means of all or selected observed values at each station.

The date of the observation shall be found on the fifth column as represented to second decimal place of year.

The magnetic elements are shown as positive westwards for declination, magnetic northwards for horizontal intensity, and downwards for dip. And other three elements of geomagnetic field, the north component X, west component Y and downward component Z, are calculated from the values of former three elements.

Hereafter, this expression for the geomagnetic elements is used in the case of being not given specially notice.

The last column headed "relation to former survey" shows the situation of observed point of this magnetic survey with respect to the previous one, but each letter A, B, C and N in this column has the same indication as shown in Table I.

TABLE IV. DIRECTLY OBSERVED VALUES

No.	Station	Latitude	Longitude	Date	Elements of Terrestrial Magnetism						*
					δ	θ	H	X	Y	Z	
1	Wakkanai (稚内)	45° 25' 43"	141° 40' 12"	1954.57	9 38.2	59 14.8	26184	25815	4383	44006	N
2	Kabuka (香深)	18 09	02 59	59	8 56.5	24.7	057	740	050	080	C
3	Esasi (枝幸)	44 56 02	142 35 01	56	42.0	58 50.0	232	930	3968	43371	C
4	Yagisiri (焼尻)	26 25	141 25 37	62	19.0	59 01.3	164	889	784	582	N
5	Monbetu (紋別)	20 54	143 20 54	55	47.8	57 51.4	588	26275	4066	42314	B
6	Rausu (羅臼)	44 01 01	145 11 42	54.67	7 11.4	57 10.2	26589	26380	3328	41211	C
7	Rumoi (留萌)	43 56 03	141 38 55	63	8 36.9	43.9	935	631	4035	42659	B
8	Memambetu (女満別)	54 26	144 11 33	68	10.6	31.0	568	298	3779	41730	A
9	Asahigawa (旭川)	46 20	142 22 40	68	50.1	31.6	777	459	4113	42075	A
10	Sibetu (標津)	39 16	145 08 25	65	01.4	13.7	604	344	3713	41326	A
11	Nemuro (根室)	43 19 18	145 36 04	54.65	8 38.6	57 29.1	26381	26081	3965	41386	C
12	Kotoni (琴似)	04 18	141 18 11	53	51.1	56 42.4	27255	930	4194	502	N
13	Iwanai (岩内)	42 58 54	140 31 11	52	56.9	55.4	177	846	227	726	B
14	Siranuka (白糠)	57 22	144 03 37	64	7 43.6	30.1	073	827	3640	40905	C
15	Ikeda (池田)	55 35	143 27 00	63	58.6	29.3	072	810	757	883	C
16	Tomikawa (富川)	42 30 42	142 02 27	54.61	8 31.8	56 20.9	27406	27103	4065	41169	B
17	Setana (瀬棚)	27 10	139 51 30	51	7 57.0	09.3	815	548	3847	479	B
18	Muroran (室蘭)	19 28	140 58 01	60	9 01.9	11.6	884	538	4377	642	N
19	Hiroo (広尾)	16 00	143 18 00	62	7 57.7	55 39.5	528	263	3813	40292	A
20	Mori (森)	06 06	140 34 48	59	8 05.9	56 03.1	657	381	896	41083	A
21	Esan (恵山)	41 47 10	141 09 10	54.58	7 15.7	55 32.8	27959	27735	3534	40752	B
22	Ōma (大間)	32 01	140 55 31	55	8 33.6	24.7	571	264	4104	39984	N
23	Matumae (松前)	25 42	06 41	57	06.3	54 47.9	28427	28143	008	40295	A
24	Tanabu (田名部)	16 52	141 12 45	55	29.5	55 01.2	016	27709	137	041	B
25	Nohezi (野辺地)	40 51 32	08 13	54	03.9	54 26.5	207	928	3957	39460	A
26	Azigasawa (鯨ヶ沢)	40 46 31	140 12 54	54.53	7 48.2	54 38.8	28315	28053	3844	39912	A
27	Ōdate (大館)	16 11	32 17	52	51.4	53 57.1	437	170	887	071	B
28	Kuzi (久慈)	11 29	141 47 03	50	18.3	54.6	603	371	637	239	A
29	Akita (秋田)	39 43 09	140 06 07	51	23.3	21.7	833	594	708	38769	B
30	Morioka (盛岡)	42 20	141 09 35	48	17.7	52 56.6	821	588	660	168	N

TABLE IV. DIRECTLY OBSERVED VALUES-CONTINUED

No.	Station	Latitude	Longitude	Date	Elements of Terrestrial Magnetism						*
					δ	θ	H	X	Y	Z	
31	Miyako (宮古)	39° 37' 07"	141° 57' 39"	1954.49	7° 25.6'	53° 19.0'	28628	28388	3700	38431	C
32	Sakata (酒田)	38° 54' 24"	139° 50' 47"	50	23.1	52° 29.8'	29234	991	757	094	A
33	Onagawa (女川)	26° 40'	141° 27' 00"	47	6° 50.7'	51° 44.1'	134	926	472	36936	A
34	Sendai (仙台)	14° 30'	140° 51' 36"	46	7° 27.7'	50.0'	186	939	790	37133	A
35	Murakami (村上)	13° 05'	139° 28' 59"	49	14.4	38.6	543	29308	723	332	A
36	Ryōtu (両津)	38° 05' 04"	138° 25' 42"	54.46	7° 19.7'	51° 42.2'	29651	29409	3782	37549	A
37	Aikawa (相川)	02° 10'	14° 37'	47	22.6	48.2	457	213	782	438	A
38	Niigata (新潟)	55° 07'	139° 02' 18"	48	17.8	35.6	515	276	749	230	A
39	Wazima-1 (輪島 1)	23° 35'	136° 53' 55"	55.60	08.1	11.5	30031	799	730	340	A
40	Wazima-2 (輪島 2)	23° 23'	53° 55'	60	6° 49.9'	00.7'	106	892	581	193	A
41	Tōkamati (十日町)	37° 07' 47"	138° 46' 04"	55.56	6° 46.7'	50° 47.5'	29968	29759	3537	36734	C
42	Itoigawa (糸魚川)	02° 12'	137° 51' 58"	57	53.4	42.5	930	714	590	578	A
43	Kuroiso (黒磯)	36° 57' 56"	140° 03' 23"	54.64	7° 01.2'	18.3	923	699	657	048	A
44	Ueda (植田)	53° 51'	48° 37'	66	6° 28.0'	13.8	739	550	350	35732	N
45	Toyama (富山)	41° 03'	137° 04' 39"	55.59	53.4	27.2	30097	880	610	36450	N
46	Matuida (松井田)	36° 19' 00"	138° 47' 30"	54.72	6° 41.2'	49° 32.5'	30245	30039	3522	35465	B
47	Mito (水戸)	21° 09'	140° 26' 44"	68	11.7	30.9	041	29866	242	192	N
48	Sioya (塩屋)	17° 48'	136° 15' 06"	55.61	45.3	50° 05.1'	399	30188	576	36337	A
49	Saigō-1 (西郷 1)	13° 18'	133° 18' 35"	69	47.3	25.0	586	372	615	994	N
50	Saigō-2 (西郷 2)	12° 09'	20° 07'	69	35.6	51° 57.0'	31002	797	560	39609	B
51	Takayama (高山)	36° 07' 55"	137° 16' 57"	55.58	6° 28.5'	49° 31.0'	30534	30339	3443	35772	B
52	Hisiura (菱浦)	05° 58'	133° 04' 40"	70	28.7	50° 07.1'	640	444	457	36669	A
53	Takehu (武生)	35° 51' 22"	136° 05' 25"	62	41.0	49° 18.6'	821	612	587	35845	N
54	Nirasaki (埴崎)	42° 47'	138° 27' 18"	54.71	23.8	01.6	365	176	383	34964	N
55	Iioka (飯岡)	42° 15'	140° 42' 18"	68	5° 53.1'	48° 21.2'	438	278	121	227	N
56	Miyazu (宮津)	35° 32' 06"	135° 11' 30"	55.65	6° 28.7'	49° 05.0'	30925	30727	3489	35680	A
57	Iida (飯田)	30° 37'	137° 50' 13"	58	19.6	48° 42.6'	606	420	373	34850	A
58	Obama-1 (小浜 1)	30° 18'	135° 44' 52"	63	36.2	59.9	916	711	555	35563	N
59	Obama-2 (小浜 2)	30° 09'	44° 49'	63	36.1	58.7	914	709	554	535	B
60	Tottori (鳥取)	28° 50'	134° 15' 22"	67	41.5	49° 24.4'	31035	824	617	36218	N

61	Yonago	(米子)	35	25	37	133	19	33	1955.68	6	32.2	49	36.3	30935	30734	3522	36355	B
62	Hozumi	(穂積)		22	39	136	42	08	62		21.1	48	42.0	860	671	414	35127	N
63	Izumo imaiti	(出雲今市)		21	30	132	45	10	71		25.1	49	45.5	872	678	451	36478	B
64	Kamogawa	(鴨川)		05	45	140	06	17	54.69		04.4	47	45.2	556	385	233	33643	A
65	Sasayama	(篠山)		04	09	135	13	16	55.66		27.6	48	36.5	31058	861	494	35239	C
66	Hamada	(浜田)	34	53	51	132	05	56	55.73	6	34.7	49	13.3	31544	31336	3614	36572	N
67	Himezi	(姫路)		52	12	134	39	09	70		18.7	48	25.5	248	059	436	35226	N
68	Miyosi	(三次)		48	22	132	51	30	72		34.4		45.5	314	108	585	717	B
69	Takahasi	(高梁)		47	08	133	36	30	71		20.9		26.7	381	189	470	401	B
70	Senzu	(泉津)		46	31	139	25	29	54.75	5	15.9		19.2	30572	30443	2805	34337	C
71	Iga Ueno	(伊賀上野)	34	46	02	136	07	38	55.62	6	13.9	48	04.6	31101	30917	3376	34634	N
72	Motomura	(元村)		44	41	139	21	52	54.77	5	51.0	47	58.7	753	31588	236	35239	C
73	Utumi	(内海)		44	18	137	58	54	55.61	6	10.5	48	01.7	30991	30811	334	34453	N
74	Mabusi	(間伏)		41	24	139	23	18	54.76	5	11.7	46	37.8	31623	31493	2863	33475	A
75	Habu	(波浮)		41	11		26	29	75	8	01.0	48	12.7	228	30923	4355	34941	A
76	Simoda	(下田)	34	40	02	138	56	44	54.69	5	41.9	47	19.6	30873	30720	3065	33488	C
77	Hukue	(福江)		37	24	137	05	46	55.59	6	07.1		48.2	31045	868	309	35242	N
78	Omaezaki	(御前崎)		36	24	138	10	30	57	5	52.7		30.6	30991	828	174	33833	N
79	Miyagawa	(宮川)		30	11	136	40	38	64	6	01.9		43.3	31146	973	273	34255	B
80	Hukuyama	(福山)		27	57	133	23	04	72		11.6	48	04.0	540	31356	403	35111	N
81	Senzaki	(仙崎)	34	22	54	131	12	18	55.75	6	01.0	48	15.3	31910	31734	3345	35758	C
82	Sumoto	(洲本)		20	05	134	54	33	93		08.5	47	43.5	405	224	360	34544	C
83	Hirosima	(広島)		17	56	132	26	31	74		02.5		59.6	724	548	339	35225	N
84	Nagasima	(長島)		12	26	136	20	26	65	5	57.3		23.4	269	100	244	33993	C
85	Izuhara-1	(厳原 1)		12	08	129	17	31	77	6	15.3	48	22.3	991	801	485	35997	A
86	Izuhara-2	(厳原 2)	34	12	06	129	17	45	55.78	6	11.9	48	25.8	31937	31750	3448	36010	A
87	Yamaguti	(山口)		11	07	131	28	27	77		02.4	47	58.9	872	695	354	35375	C
88	Miyake Izu	(三宅伊豆)		07	06	139	30	32	36	4	54.7	48	33.3	29569	29460	2532	33486	C
89	Ako	(阿古)		04	36		28	59	35		17.7		20.4	748	664	228	435	A
90	Tubota	(坪田)		03	20		33	02	35	6	12.8	47	49.4	30581	30401	3310	754	C
91	Imabari	(今治)	34	03	42	133	00	54	55.75	6	02.4	47	38.6	31710	31534	3337	34780	N
92	Kawanoe	(川之江)		00	34		34	14	76		03.0		30.4	636	460	334	533	C
93	Totukawa	(十津川)	33	56	18	135	47	47	67	5	52.8		08.9	426	261	220	33876	N
94	Katumoto	(勝本)		51	05	129	41	33	78		57.6	48	04.5	940	768	316	35566	C
95	Minabe	(南部)		46	10	135	17	58	70		54.9	46	58.2	533	365	249	33779	N

TABLE IV. DIRECTLY OBSERVED VALUES-CONTINUED

No.	Station	Latitude	Longitude	Date	Elements of Terrestrial Magnetism						*
					δ	θ	H	X	Y	Z	
96	Hukuoka (福岡)	33° 39' 48"	130° 18' 50"	1955.76	5° 37.8	47° 36.7	31932	31778	3133	34984	N
97	Nakatu (中津)	36 12	131 11 16	78	55.5	23.2	32066	895	310	855	A
98	Ōzato (大津里)	35 57	134 22 00	92	54.7	46 55.2	31691	522	264	33889	A
99	Karatu-1 (唐津 1)	27 05	129 58 10	79	48.6	47 14.2	32223	32057	262	34842	A
100	Karatu-2 (唐津 2)	27 03	58 08	79	47.1	17.4	183	019	244	864	N
101	Susaki (須崎)	33 24 36	133 17 31	55.91	5 48.8	46 49.8	31867	31703	3228	33971	N
102	Misaki (三崎)	23 03	132 07 33	89	49.1	54.8	971	806	241	34181	B
103	Ōita (大分)	13 48	131 35 31	78	34.6	00.9	32729	32574	181	33910	N
104	Uwazima (宇和島)	13 02	132 33 08	88	42.7	39.8	007	31848	185	922	C
105	Yanagawa (柳川)	09 40	130 24 32	84	40.9	48.0	298	32139	198	34394	C
106	Haiki (早岐)	33 07 51	129 48 51	55.80	5 38.3	46 47.9	32426	32269	3186	34528	C
107	Mitune (三根)	06 56	139 48 18	39	7 24.6	45 19.0	30530	30275	937	30869	N
108	Ōgagō (大賀郷)	06 02	47 13	41	6 28.4	44 24.9	31809	31606	586	31166	A
109	Nakanogō (中之郷)	03 45	48 59	40	4 03.3	46 27.6	30852	30775	2182	32466	A
110	Nakamura (中村)	32 58 02	132 56 30	90	5 36.5	18.0	32091	31937	3136	33581	N
111	Saeki (佐伯)	32 57 32	131 54 00	55.81	5 28.8	46 29.6	32123	31976	3068	33843	C
112	Miyazi (宮地)	56 32	07 00	79	14.0	40.2	191	32057	2936	34124	C
113	Kumamoto (熊本)	48 47	130 43 38	85	42.5	16.7	237	077	3206	33709	C
114	Simabara (島原)	47 14	22 07	83	35.5	19.2	321	167	149	846	A
115	Hukue (福江)	41 51	128 50 29	81	30.4	45 50.4	705	554	138	678	C
116	Tomie-1 (富江 1)	32 36 54	128 45 52	55.82	5 01.9	46 04.7	32641	32515	2863	33893	A
117	Tomie-2 (富江 2)	36 34	45 53	82	22.6	00.4	33114	968	3103	34298	C
118	Tomitaka (富高)	24 28	131 37 32	81	23.1	45 40.1	32466	323	047	33233	B
119	Hitoyosi (人吉)	12 57	130 45 22	88	26.0	43.5	541	395	081	375	B
120	Usibuka (牛深)	11 35	01 39	87	12.0	30.4	746	611	2968	330	C
121	Miyazaki (宮崎)	31 55 05	131 26 16	55.82	5 15.4	45 04.3	32710	32572	2997	32792	C
122	Nakakosiki (中甕)	49 49	129 52 14	89	4 48.3	12 5	924	808	758	33164	C
123	Kagosima (鹿兒島)	36 32	130 32 30	84	45.7	44 32.0	893	780	730	32361	N
124	Sibusi (志布志)	28 29	131 06 02	83	5 00.5	24.7	929	803	875	260	C
125	Makurazaki (枕崎)	15 57	130 17 26	90	4 40.7	26.8	941	831	687	311	B

126	Nisino-omote	(西之表)	30	44	08	131	00	09	1955.84	4	44.2	43	25.0	33168	33055	2739	31384	C
127	Miyanoura	(宮之浦)		24	58	130	34	45	85		40.6	42	58.2	374	263	721	089	N
128	Minamitane	(南種子)		24	36		54	13	85		35.5	43	03.2	229	122	660	045	N
129	Anbō	(安房)		18	27		39	15	86		37.3	42	46.9	380	272	690	30891	N
130	Nase-1	(名瀬1)	28	22	33	129	29	52	93	3	50.1	39	34.8	34086	34010	280	28178	N
131	Nase-2	(名瀬2)	28	21	40	129	30	12	55.92	3	54.6	40	01.3	34250	34170	2336	28761	C
132	Naon	(名音)		19	52		19	03	93		56.4	39	50.8	297	216	357	623	N
133	Koniya	(古仁屋)		08	45		19	02	94		52.8		44.0	377	298	326	574	B

* Relation to the former survey

SECULAR VARIATION IN GEOMAGNETIC FIELD IN JAPAN AND ITS NEIGHBOURHOOD

We have had two complete magnetic surveys in Japan conducted by the Tōkyō Imperial University under supervision of professor A. Tanakadate, and five surveys made by our Office; namely, 1887 and 1893–6, and 1912–13, 1922–23, 1932–33, 1942–43 and 1949–50.

The magnetic stations in the present survey were kept to repeat at same stations of the foregone surveys as far as possible, to obtain accurate data on secular change. The results of magnetic observation at these stations which are the most important material for construction of the magnetic charts, are shown in Table V of this Bulletin.

However, as we could not have reoccupied the original stations owing to the growth of town or the other source of artificial local disturbance at some magnetic stations, their sites were expressed for each survey in this table. And the date of observation was represented to second decimal place of year as the representation shown in Table IV.

As for the secular change in geomagnetic field in Japan and its neighbourhood, it is generally noticed that

- (1) The secular change of declination in this region shows a comparative regular form and can be expressed by the quadratic equation of time as the following,

$$M_t = A + B\Delta t + C\Delta t^2.$$

where M_t represents the value of the magnetic element at the station at the time t , Δt is the time interval (in years) between t and a standard epoch, A , B and C being the constants which are to be determined from the observed values at the station about each magnetic elements.

- (2) The westerly declination increases year by year, but it seems to decrease in a annual increment at present.

- (3) As the secular change of dip and horizontal intensity the recent annual changes are very small in general but can be expressed by a quadratic function of time similar to the secular change in declination.

Moreover, with the accumulation of more accurate and systematic

data since 1932 at Kakioka Magnetic Observatory it is evident that the secular change of magnetic elements at a station can be expressed with sufficient accuracy by a simple formula.

Hence, we derive an empirical formula of three elements for each station, from the data in Table V, assuming that the magnetic element in that station can be expressed by an equation of the form

$$M_t = A + B(t - 1955.0) + C(t - 1955.0)^2.$$

For a station, however, where the observations were carried out more than three times, the values of constant were determined by the method of least squares, where the constant term A , and the coefficients B and C in the empirical formula are the value of each magnetic element, the rate of secular change and half the annual acceleration at the epoch 1955.0. The values of the constant for each station will be found in Table VI.

The geographical distribution of the value of B and C can be expressed by a quadratic function of latitude and longitude as follows:

$$m = m_0 + a\Delta\varphi + b\Delta\lambda + c\Delta\varphi^2 + d\Delta\varphi\Delta\lambda + e\Delta\lambda^2,$$

while $\Delta\varphi = \varphi - 37^\circ$ and $\Delta\lambda = \lambda - 135^\circ$ expressed in minutes, and m_0 , a , b , c , d and e are the constants which are to be determined from the values of B and C for declination, dip and horizontal intensity respectively at 1955.0.

TABLE V. RESULTS OF OBSERVATIONS AT REPEATED STATIONS

No.	Station	Lat.	Long.	Date	Declination	Dip	Horizontal Intensity
1	Wakkanai (稚 内)	45° 25.5' 25.5 25.3 25.3 23.6	141° 40.2' 40.4 40.5 40.5 41.1	1894.71 1912.49 22.70 32.74 42.67 50.68	6° 48.6' 7 46.2 8 20.5 42.3 9 03.8 35.2	59° 17.3' 18.1 18.9 21.7 15.5 21.3	25782 ^r 978 961 932 26003 081
2	Kabuka (香 深)	45 18.3	141 02.7	1912.48	7 48.3	59 33.6	25833
3	Esasi (枝 幸)	44 56.2	142 34.6	1912.50	6 57.8	58 47.6	26138
4	Yagisiri (焼 尻)	44 26.1	141 23.0	1912.46	6 56.1	58 47.6	26114
5	Monbetu (紋 別)	44 21.2 21.2 20.9 20.9	141 21.3 21.5 20.9 20.9	1894.74 1912.53 22.69 32.75 42.69	5 59.6 6 58.3 7 31.8 48.6 8 18.3	57 53.6 54.1 58.9 58 00.2 57 54.3	26232 403 366 307 389
6	Rausu (羅 白)	44 01.4	145 11.4	1894.78 1912.56	4 55.4 5 34.3	57 18.0 21.2	26384 461
7	Rumoi (留 萌)	43 56.9 56.9 56.7 56.6 56.0	141 37.7 37.9 38.2 38.1 39.1	1912.87 22.61 33.75 42.65 51.83	7 30.4 41.1 8 19.7 19.3 49.0	57 35.4 56.8 36.8 53.7 53.0	26776 598 778 528 798
8	Memambetu (女 満 別)	43 54.4	144 11.6	1950.70	8 06.0	57 32.3	26501
9	Asahigawa (旭 川)	43 45.0 45.0 46.3	142 22.5 22.7 22.7	1894.58 1912.85 22.62 42.64	6 18.0 7 10.4 48.1 8 21.2	57 31.9 35.5 37.1 35.2	26415 558 540 565
10	Sibetu (標 津)	43 39.8 39.8 39.3 39.3 39.3	145 06.8 07.0 08.4 08.4 08.6	1894.79 1912.57 22.66 32.79 42.70 50.72	5 04.1 6 19.9 51.4 7 09.6 41.2 56.7	57 16.9 21.8 23.2 20.5 18.5 15.8	26181 370 318 318 338 541
11	Nemuro (根 室)	43 19.4 19.6	145 35.2 35.3	1912.58 43.79	5 10.0 4 37.4	57 31.8 56 42.8	26301 25723
12	Kotoni (琴 似)	43 04.2 04.2 04.3 04.3	141 20.8 20.8 21.0 21.0	1887.55 94.55 1912.84 22.65 32.86 42.63	6 00.0 09.3 7 00.5 29.6 56.2 8 19.7	56 41.5 57 10.1 01.0 03.9 56 52.0 44.6	26766 494 830 773 896 992
13	Iwanai (岩 内)	42 58.9	140 31.0	1894.53 1912.42	6 23.8 7 19.0	56 53.8 57 00.2	26787 950
14	Siranuka (白 糠)	42 56.7 56.7 57.1 57.1 56.3	144 04.2 04.4 04.8 04.9 03.7	1894.72 1912.61 22.67 32.80 42.72 51.84	5 04.1 57.3 6 30.2 47.4 7 12.1 47.2	56 40.3 32.5 38.5 40.0 35.1 46.4	26771 895 864 805 867 27012
15	Ikeda (池 田)	42 55.6 55.6	143 25.3 25.5	1912.62 22.68	6 14.3 47.5	56 36.9 37.1	26889 859

TABLE V. RESULTS OF OBSERVATIONS AT REPEATED STATIONS
-CONTINUED

No.	Station	Lat.	Long.	Date	Declination	Dip	Horizontal Intensity
16	Tomikawa (富川)	42° 31.0 31.0 30.8 30.8	142° 01.8 02.0 02.4 02.4	1894.59 1912.88 22.61 33.61 42.75	6° 00.0 51.1 7 17.0 40.2 8 02.0	56° 26.8 25.6 36.5 31.3 25.3	26985 27114 26995 27063 175
17	Setana (瀬棚)	42 27.2 27.2 26.9 26.9 27.2	139 50.8 51.0 51.5 51.5 51.7	1894.53 1912.42 22.45 32.75 42.62 51.85	6 03.9 54.1 7 29.6 37.0 8 02.8 7 54.0	56 13.8 17.1 19.8 18.4 13.4 15.8	27393 545 436 485 606 783
18	Muroran (室蘭)	42 20.6 18.3	141 00.0 00.2	1912.89 43.71	7 02.2 44.8	56 23.3 32.2	27032 135
19	Hiroo (広尾)	42 16.0 16.0	143 18.0 18.0	1942.74 50.73	7 30.6 52.8	55 44.6 44.9	27301 444
20	Mori (森)	42 06.4 06.4 06.1 06.1	140 34.0 34.0 34.8 34.8	1894.51 1912.89 22.44 32.74 42.61	5 39.1 6 30.8 7 17.0 17.4 42.6	56 15.5 55 53.8 56 06.6 12.9 09.5	27179 458 412 324 390
21	Esan (恵山)	41 47.2	141 09.3	1951.88	7 37.8	54 52.7	28605
23	Matumae (松前)	41 26.0 25.7 25.7 25.7	140 06.2 06.7 06.7 06.7	1894.55 1912.40 33.62 42.60 50.75	5 47.7 6 32.5 7 19.7 41.3 8 02.6	55 07.0 54 54.8 56.8 52.5 55.1	27764 28136 072 165 320
24	Tanabu (田名部)	41 17.3	141 12.2	1912.37	6 50.1	55 12.2	27695
25	Nohezi (野辺地)	40 52.4 52.2 52.2 52.2 51.5	141 06.2 06.6 06.3 06.3 08.2	1887.53 95.67 1912.36 22.57 32.76 42.79 50.54	5 31.7 53.2 6 40.6 7 01.1 29.5 51.7 54.8	54 44.1 42.1 37.3 37.3 48.4 39.6 32.5	27576 692 950 874 837 920 28101
26	Azigasawa (鰺ヶ沢)	40 46.7 46.4 46.5 46.5 46.5	140 12.1 12.1 12.8 12.8 12.9	1895.64 1912.69 22.58 33.76 42.59 50.53	5 34.5 6 22.3 46.1 7 03.1 22.2 39.2	54 46.2 47.0 47.5 50.8 43.0 44.5	27763 28024 27955 965 28066 215
27	Ōdate (大館)	40 16.6 16.6 16.2	140 32.4 32.4 32.4	1887.58 95.64 1912.71 22.59 42.58	5 15.7 37.2 6 24.2 45.0 7 28.4	54 12.5 02.1 04.7 04.1 00.9	27743 821 28162 093 209
28	Kuzi (久慈)	40 11.9 11.4 11.5 11.5 11.5	141 47.4 47.0 47.1 47.1 47.1	1887.52 95.54 1912.35 22.56 32.77 42.77 50.55	4 37.7 5 03.6 47.8 6 15.0 30.7 54.0 7 12.5	54 07.4 01.2 00.2 03.9 02.8 53 59.7 57.2	27983 28035 291 234 262 333 523

TABLE V. RESULTS OF OBSERVATIONS AT REPEATED STATIONS
-CONTINUED

No.	Station	Lat.	Long.	Date	Declination	Dip	Horizontal Intensity
29	Akita (秋田)	39° 42.5 43.0 42.0 43.0	140° 06.8 06.1 06.1 06.1	1922.86 32.73 42.66 50.52	6° 31.4 39.8 7 01.6 22.1	53° 33.0 32.9 28.3 28.7	28520 482 574 721
30	Morioka (盛岡)	39 42.4	141 07.8	1912.33	6 15.0	53 02.8	28556
31	Miyako (宮古)	39 38.2	141 57.7	1913.36	6 28.1	53 28.1	28439
32	Sakata (酒田)	38 55.2 55.2 54.4 54.4 54.4	139 50.1 50.1 50.8 50.8 50.8	1887.60 95.61 1912.77 22.65 33.76 42.57 49.92	5 11.0 13.2 57.5 6 24.7 38.6 58.8 7 16.7	52 51.9 44.3 40.8 42.9 42.5 39.3 38.7	28465 651 825 816 813 905 29065
33	Onagawa (女川)	38 26.8 26.7 26.7 26.7	141 27.0 26.9 27.0 27.0	1913.34 32.78 42.79 50.56	5 32.7 6 06.7 27.9 50.6	51 54.7 54.9 51.2 50.6	28786 777 865 987
34	Sendai (仙台)	38 15.2 14.5 14.5	140 51.7 51.6 51.6	1913.34 33.77 42.79	5 58.9 6 48.5 7 06.7	51 54.6 52 02.0 51 58.1	28823 792 888
35	Murakami (村上)	38 12.4 13.1	139 29.2 29.0	1912.78 49.91	5 54.2 7 09.5	51 50.5 44.9	29158 419
36	Ryōtu (両津)	38 05.1 05.1 05.1 05.1	138 25.7 25.7 25.7 25.7	1887.62 93.67 1912.80 33.79 42.56 49.86	5 00.0 43.0 6 00.9 39.0 58.5 7 14.8	52 03.7 51 52.9 49.2 52.9 49.3 50.5	28950 29000 234 260 349 484
37	Aikawa (相川)	38 02.2 02.2 02.2	138 14.6 14.6 14.6	1933.79 42.56 49.88	6 43.0 59.8 7 17.3	52 01.1 51 54.4 52.3	29047 164 340
38	Niigata (新潟)	37 55.4 55.4 55.1 55.1 55.1	139 01.9 01.9 02.3 02.3 02.3	1887.63 95.62 1912.80 22.68 32.70 42.55 49.90	5 09.4 17.2 57.4 6 18.2 35.8 7 02.0 14.0	51 56.9 57.0 47.0 43.5 53.4 44.3 44.8	28699 947 29102 137 043 200 346
39	Wazima-1 (輪島1)	37 23.8 23.8 23.6 23.6 23.6	136 53.5 53.5 53.9 53.9 53.9	1893.73 1912.37 22.70 32.69 42.46 48.62	5 13.1 49.9 6 10.5 29.3 26.4 58.1	51 34.6 23.0 15.6 21.5 16.5 20.1	29190 617 587 639 733 830
40	Wazima-2 (輪島2)	37 23.4 23.4 23.4	136 53.9 53.9 53.9	1932.69 42.47 48.62	6 15.7 31.9 45.4	51 15.2 09.0 12.6	29674 845 873
41	Tōkamati (十日町)	37 08.7 08.7	138 45.2 45.2	1912.83 22.69	5 40.1 6 00.9	51 00.5 50 58.7	29538 504

TABLE V. RESULTS OF OBSERVATIONS AT REPEATED STATIONS
-CONTINUED

No.	Station	Lat.	Long.	Date	Declination	Dip	Horizontal Intensity
42	Itoigawa (糸魚川)	37° 02.8' 02.8' 02.2' 02.2' 02.2'	137° 52.0' 52.0' 52.0' 52.0' 52.0'	1893.77 1912.84 22.69 33.81 42.47 49.93	5° 06.5' 45.2' 6° 06.7' 17.9' 33.5' 50.3'	50° 58.2' 55.7' 52.9' 53.1' 49.9' 53.0'	29285 ^r 505 490 515 619 739
43	Kuroiso (黒磯)	36° 58.1' 58.1' 57.9' 57.9'	140° 03.8' 03.8' 03.4' 03.4'	1913.32 22.44 42.53 49.94	5° 55.5' 6° 06.1' 36.9' 50.2'	50° 27.3' 21.9' 27.8' 25.2'	29451 437 550 719
44	Ueda (植田)	36° 54.5' 54.5' 54.9' 54.9' 53.8'	140° 48.4' 48.6' 48.3' 48.3' 48.6'	1895.56 1912.90 23.08 32.78 42.79 50.58	4° 30.2' 5° 11.8' 36.3' 46.2' 6° 07.2' 24.6'	50° 25.0' 20.6' 15.5' 20.5' 18.9' 20.6'	29258 384 399 428 475 643
45	Toyama (富山)	36° 41.0'	137° 13.0'	1912.38	5° 37.8'	50° 46.8'	29565
46	Matuida (松井田)	36° 18.8' 18.8' 19.3' 19.3'	138° 47.7' 47.9' 47.5' 47.5'	1893.70 1913.34 23.01 42.53 49.94	4° 39.6' 5° 29.7' 48.9' 6° 19.5' 35.7'	49° 59.7' 42.4' 39.0' 40.7' 36.7'	29613 858 844 934 30119
47	Mito (水戸)	36° 22.6' 22.6'	140° 29.0' 29.2'	1912.91 22.08	5° 00.8' 5° 30.5'	49° 44.0' 38.5'	29384 605
48	Sioya (塩屋)	36° 17.8' 17.8' 17.8' 17.8' 17.8'	136° 14.5' 14.5' 15.1' 15.1' 15.1'	1887.76 93.71 1912.35 22.71 33.54 42.46 48.64	4° 59.2' 5° 01.8' 37.5' 6° 07.0' 05.2' 22.9' 35.8'	50° 30.8' 19.3' 14.3' 19.7' 16.7' 13.9' 12.7'	29555 687 952 940 998 30077 210
50	Saigō (西郷)	36° 12.1' 12.1' 12.2'	133° 19.8' 20.2' 20.2'	1913.36 33.52 42.42	6° 30.5' 54.5' 7° 26.7'	51° 09.4' 03.5' 50° 45.6'	30055 689 778
51	Takayama (高山)	36° 07.7'	137° 16.9'	1913.29	5° 23.2'	49° 46.4'	30073
52	Hisiura (菱浦)	36° 06.0' 06.1' 06.1' 06.0'	133° 04.7' 05.1' 05.1' 04.7'	1913.35 33.53 42.43 50.50	4° 32.9' 5° 48.5' 6° 08.9' 20.7'	50° 08.6' 19.6' 13.4' 13.5'	30414 846 962 529
53	Takehu (武生)	35° 52.7'	136° 10.8'	1912.35	5° 21.2'	49° 24.1'	30610
56	Miyazu (宮津)	35° 32.1' 32.1'	135° 11.5' 11.7'	1896.53 1912.33 22.90	4° 52.2' 5° 17.5' 44.9'	49° 25.4' 20.3' 19.3'	30183 446 438
57	Iida (飯田)	35° 30.6' 30.6' 30.6'	137° 50.2' 50.2' 50.2'	1933.82 42.51 50.80	5° 41.7' 57.1' 6° 15.6'	48° 58.9' 54.8' 54.4'	30153 253 437
59	Obama (小浜)	35° 30.4' 30.4' 30.1' 30.1' 30.2'	135° 44.2' 44.4' 44.8' 44.8' 44.8'	1887.75 96.53 1912.34 22.85 32.68 42.45 50.51	4° 54.1' 57.8' 5° 23.1' 44.9' 58.6' 6° 13.0' 31.1'	49° 30.4' 19.9' 14.0' 12.5' 12.7' 09.9' 09.4'	30018 096 424 435 490 582 765

TABLE V. RESULTS OF OBSERVATIONS AT REPEATED STATIONS
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No.	Station	Lat.	Long.	Date	Declination	Dip	Horizontal Intensity
60	Tottori (鳥取)	35° 30.4 30.4 29.9 29.9	134° 14.4 14.6 14.4 14.4	1896.56 1913.25 22.88 33.54 42.44	5° 06.0 33.6 54.8 6 04.7 18.9	49° 41.5 37.8 35.1 34.7 32.3	30179 478 499 562 683
61	Yonago (米子)	35 25.8	133 19.4	1913.34	5 26.4	49 41.7	30414
63	Imaiti (出雲今市)	35 21.3 21.3 27.7 21.7	132 45.2 45.4 45.2 45.2	1887.73 96.58 1913.37 22.89 32.67 42.41	4 48.9 51.4 5 20.0 41.4 55.8 6 08.0	50 13.1 49 59.6 49.3 51.2 52.9 50.5	30022 295 484 511 494 600
64	Kamogawa (鴨川)	35 05.9 05.8 05.8 05.8	140 06.3 06.3 06.3 06.3	1895.53 1913.28 33.83 42.78 50.76	4 11.4 54.0 5 22.5 42.9 6 01.0	48 19.7 06.8 04.3 47 57.7 54.6	29851 30030 094 194 394
65	Sasayama (篠山)	35 04.2	135 14.0	1896.52 1913.25	4 49.9 5 18.4	48 55.0 52.0	30259 567
66	Hamada (浜田)	34 54.0	132 03.8	1913.38	5 06.0	49 28.7	30581
68	Miyosi (三次)	34 48.4	132 51.2	1896.57 1913.20	4 57.6 5 26.5	49 06.7 48 58.6	30590 761
69	Takahasi (高梁)	34 47.0	133 36.6	1896.61 1913.22	4 46.5 5 12.9	48 45.5 38.7	30700 863
70	Senzu (泉州)	34 46.8 46.6 46.6	139 24.5 24.7 24.7	1913.08 33.12 43.08	6 07.0 40.9 7 15.9	49 38.4 00.1 48.8	29942 523 741
71	Iga Ueno (伊賀上野)	34 45.9	136 07.8	1913.24	5 10.8	48 16.7	30596
72	Motomura (元村)	34 45.1 45.0 45.0	139 21.3 21.5 21.5	1913.09 33.12 43.09	4 43.3 01.6 7 12.9	50 50.0 49 30.1 50 18.3	29937 31339 30373
74	Mabusi (間伏)	34 41.5 41.4 41.4	139 23.1 23.3 23.3	1913.09 33.11 43.10	4 06.9 42.7 56.7	47 11.4 08.5 46 51.0	31117 171 416
75	Habu (波浮)	34 41.2 41.0 41.2	139 26.2 26.6 26.6	1913.10 33.11 43.11	6 31.7 7 11.4 35.5	48 32.8 37.7 23.0	30933 898 31008
76	Simoda (下田)	34 40.5	138 56.8	1913.13	4 38.5	47 37.4	30353
79	Miyagawa (宮川)	34 30.8 30.8 30.1 30.1	136 40.2 40.5 40.5 40.5	1913.18 23.02 32.36 42.41	5 04.5 20.9 27.8	47 59.8 53.3 55.8 54.8	30607 625 702 759
80	Hukuyama (福山)	34 29.0	133 21.6	1913.20	5 06.0	48 19.6	31004
81	Senzaki (仙崎)	34 23.6	131 11.5	1913.39	4 53.2	48 21.6	31376

TABLE V. RESULTS OF OBSERVATIONS AT REPEATED STATIONS

-CONTINUED

No.	Station	Lat.	Long.	Date	Declination	Dip	Horizontal Intensity
82	Sumoto (洲 本)	34° 20.5' 20.5 20.3 20.3	134° 53.0' 53.2 53.5 53.5	1896.62 1913.08 22.98 33.37 42.44	4° 31.7' 5 01.2 21.1 29.4 44.3	48° 06.5' 47 58.9 51.8 55.1 50.3	30577 879 915 964 31105
83	Hirosima (広 島)	34 22.8 22.8 23.0 23.0	132 27.0 27.2 27.0 27.0	1887.57 96.50 1913.34 22.92 33.36 42.46	4 27.1 33.5 59.1 5 20.1 29.6 46.0	48 39.6 25.5 17.2 15.4 16.3 06.9	30714 956 31169 162 242 423
84	Nagasima (長 島)	34 12.3	136 20.2	1896.66 1913.19	4 23.0 54.7	47 47.9 38.4	30425 739
85	Izuhara-1 (巖 原 1)	34 12.5 12.5 12.2 12.1 12.1	129 17.2 17.2 17.5 17.5 17.5	1913.26 22.94 33.44 42.89 50.46	5 03.8 21.5 30.2 43.4 58.2	48 33.5 40.2 35.0 28.1 28.3	31360 373 484 644 831
86	Izuhara-2 (巖 原 2)	34 12.1 12.1 12.1	129 17.8 17.8 17.8	1933.44 42.89 50.47	5 33.2 45.8 6 01.2	48 36.1 33.4 31.2	31437 581 818
87	Yamaguti (山 口)	34 10.5 10.5 10.6 10.6 10.6	131 28.5 28.5 28.7 28.7 28.7	1896.52 1913.31 23.12 33.51 42.47 50.49	4 31.7 56.0 5 15.7 23.8 37.6 53.8	48 19.2 06.7 10.0 09.8 04.5 04.5	31065 304 304 383 486 717
88	Mayake Izu (三宅伊豆)	34 07.0	139 31.0	1950.64	5 52.6	46 09.7	31668
89	Ako (阿 古)	34 04.1 04.1 04.6	139 29.0 29.0 29.0	1933.07 43.18 50.65	3 46.6 4 05.0 20.7	48 20.0 28.6 29.8	29400 348 564
90	Tubota (坪 田)	34 03.4 03.4 03.4	139 34.1 34.1 33.1	1933.07 43.17 50.66	5 39.3 6 08.2 21.7	48 03.2 38.9 37.7	30217 087 323
91	Imabari (今 治)	34 03.8 03.8 03.7 03.7	133 00.3 00.5 00.9 50.0	1896.74 1913.18 22.93 33.39 42.90	4 33.2 56.8 5 19.1 24.3 39.1	48 00.5 47 54.1 48.3 51.0 52.5	30960 31141 165 218 272
92	Kawanoe (川 之 江)	34 00.3	133 33.3	1896.75 1913.18	4 30.9 55.5	47 52.4 44.2	30932 31122
94	Katumoto (勝 本)	33 51.3	129 41.1	1913.29	4 40.7	48 14.4	31394
95	Minabe (南 部)	33 45.7 45.7 45.8 45.8 45.7	135 19.0 19.2 19.4 19.4 19.5	1887.55 96.62 1913.21 22.99 33.36 42.43 50.81	4 30.1 16.4 49.5 5 09.1 17.8 33.4 49.6	47 46.3 23.1 12.1 05.0 08.9 08.0 05.7	30494 766 31030 030 107 148 399

TABLE V. RESULTS OF OBSERVATIONS AT REPEATED STATIONS

-CONTINUED

No.	Station	Lat.	Long.	Date	Declination	Dip	Horizontal Intensity
97	Nakatu (中 津)	33° 36.4 36.4 36.2 36.2 36.2	131° 11.2 11.2 11.3 11.3 11.3	1887.64 96.64 1913.24 23.11 32.58 42.91 50.38	4° 22.4 26.3 52.4 5 09.4 16.8 29.2 45.9	48° 02.0 47 53.6 33.1 37.0 34.5 32.0 29.6	31000 182 488 473 590 670 937
98	Ōzato (大 里)	33 36.0 36.0 36.0 36.0	134 22.0 22.2 22.0 22.0	1896.64 1913.10 23.00 42.88 50.82	4 23.0 46.7 5 08.4 29.8 47.1	47 07.8 46 59.8 47 03.4 02.3	31190 191 352 542
99	Karatu (唐 津)	33 27.4 27.4 27.1 27.1	129 57.5 57.5 58.2 58.2	1896.66 1912.66 22.95 32.66 42.87	4 17.4 39.4 5 01.3 10.9 20.6	47 47.8 35.3 33.0 30.2 26.5	31336 580 575 933 823
101	Susaki (須 崎)	33 23.1 23.1 23.1 23.1 23.1	133 16.9 17.1 17.2 17.2 17.2	1896.67 1913.12 22.95 32.38 42.89 50.84	4 20.8 44.2 5 04.4 15.9 26.3 43.9	47 14.4 02.2 46 54.3 59.1 56.9 56.9	31096 289 340 408 502 717
102	Misaki (三 崎)	33 23.2	132 07.5	1913.29	4 41.9	47 08.1	31482
104	Uwazima (宇 和 島)	33 12.9	132 33.6	1896.68 1913.14	4 15.2 38.0	47 04.2 46 55.3	31241 401
105	Yanagawa (柳 川)	33 09.4	130 24.3	1896.63 1913.23	4 10.2 39.9	47 17.1 46 57.1	31469 761
106	Haiki (早 岐)	33 07.7	129 47.9	1912.67	4 31.2	47 06.5	31836
108	Ōgagō (大 賀 郷)	33 06.0 06.2 06.0	139 47.3 47.6 47.2	1933.05 43.23 50.62	5 51.5 6 08.7 26.9	44 38.7 37.1 33.3	31435 512 718
109	Nakanogō (中 之 郷)	33 03.8 03.8 03.8	139 49.1 48.6 49.0	1933.05 43.24 50.63	5 48.6 4 21.3 33.1	46 52.0 52.7 50.4	31101 30634 829
110	Nakamura (中 村)	32 59.3	132 55.6	1913.13	4 35.0	46 36.5	31502
111	Saeki (佐 伯)	32 57.1 57.1 57.0	131 53.6 53.6 53.9	1896.71 1913.10 23.10 32.39 49.92	4 08.5 32.4 49.9 5 15.0 08.4	46 54.3 47.1 47.8 46.1 37.2	31337 537 570 672 767
112	Miyazi (宮 地)	32 56.0 56.0 56.2 56.2	131 07.0 07.0 07.3 07.2	1896.62 1913.22 22.98 33.41 42.93	3 50.7 4 14.5 34.2 37.2 55.6	46 59.2 43.8 52.2 48.1 42.4	31523 782 624 725 838
113	Kumamoto (熊 本)	32 49.0	130 44.0	1896.61 1913.20	4 07.6 31.6	46 46.9 34.1	31407 730

TABLE V. RESULTS OF OBSERVATIONS AT REPEATED STATIONS
-CONTINUED

No.	Station	Lat.	Long.	Date	Declination	Dip	Horizontal Intensity
114	Simabara (島 原)	32° 47.2 47.2 47.3 47.3 47.2	130° 22.0 22.0 22.2 22.2 22.1	1896.59 1913.21 22.97 33.43 42.90 50.43	4° 05.6 28.8 45.4 51.2 5 09.7 25.7	46° 50.5 33.2 34.8 30.5 30.2 27.0	31427 704 726 849 919 32172
115	Hukue (福 江)	32 41.6	128 50.0	1912.69	4 24.6	48 26.9	31349
116	Tomie-1 (富 江 1)	32 36.9 36.9 36.9	128 45.9 45.9 45.9	1932.62 42.92 50.44	4 25.7 40.5 46.6	46 02.3 01.1 10.7	32007 325 472
117	Tomie-2 (富 江 2)	32 36.6 36.6 36.6	128 45.9 45.9 45.9	1932.63 42.91 50.45	4 47.9 5 00.9 10.4	46 11.0 19.4 06.9	32749 752 33139
118	Tomitaka (富 高)	32 24.6 24.6	131 37.8 37.8	1896.52 1913.11 23.10	4 00.1 23.9 43.0	46 11.2 45 59.6 46 01.0	31621 927 895
119	Hitoyosi (人 吉)	32 13.3 13.3	130 45.6 45.6	1896.57 1913.20 23.00	4 07.6 18.6 36.5	45 56.8 39.1 45.1	31739 32042 884
120	Usibuka (牛 深)	32 11.6 11.6	130 01.2 01.2	1912.73 22.99	4 13.7 31.2	45 47.3 46 49.6	32106 134
121	Miyazaki (宮 崎)	31 55.4 55.4 55.4 55.4 55.3	131 25.1 25.1 25.2 25.1 25.2	1887.67 96.52 1913.12 23.09 32.40 42.93 50.39	3 58.4 57.6 18.6 4 32.0 44.0 53.2 5 09.9	45 51.3 37.2 22.2 23.8 19.9 15.3 13.6	31562 773 32106 122 191 345 555
122	Nakakosiki (中 甕)	31 50.1	129 51.8	1912.74	3 47.9	45 14.6	32326
123	Kagosima (鹿 兒 島)	31 35.3	130 33.8	1913.15	4 18.4	44 49.6	32393
124	Sibusi (志 布 志)	31 28.3	131 05.7	1942.90	4 33.6	44 36.0	32519
125	Makurazaki (枕 崎)	31 16.1 16.1 15.9 15.6 16.0	130 17.0 17.0 17.5 17.5 17.4	1896.55 1912.95 23.02 32.42 42.97 50.40	3 42.4 47.5 54.5 4 13.2 10.5 38.5	45 09.3 44 50.8 49.4 45.0 36.1 23.4	32002 167 232 339 410 786
126	Nisino-omote (西 之 表)	30 44.3 44.3 44.2 44.2 44.2	130 59.1 59.1 59.6 59.6 59.6	1913.17 23.03 32.43 42.96 50.42	3 51.0 4 08.6 17.9 22.1 38.2	43 42.8 42.7 37.0 33.8 32.8	32548 571 650 769 33016
131	Nase-2 (名 瀬 2)	28 22.4 22.4 22.1 22.1	129 29.9 29.9 30.1 30.0	1912.93 23.05 32.44 44.01	3 07.8 24.3 31.0 31.6	40 30.5 29.4 22.4 15.2	33472 528 628 801
133	Koniya (古 仁 屋)	28 08.9	129 18.8	1912.92	3 00.8	40 18.0	33597

TABLE VI. THE VALUES OF COEFFICIENT a, b AND c OF EMPIRICAL FORMULA FOR EACH STATION

$$Mt = a + b(t - 1955.0) + c(t - 1955.0)^2$$

No.	Station		Declination			Dip			Horizontal Intensity		
			a	b	c	a	b	c	a	b	c
1	Wakkanai	(稚内)	9 40.9	2.38	-0.0077	59 16.7	-0.18	-0.003	26120	6.09	0.02
5	Monbetu	(紋別)	8 48.6	2.25	- 89	57 51.2	-0.43	- 07	533	7.95	0.06
6	Rausu	(羅臼)	7 12.2	2.39	- 20	11.3	-0.52	- 07	595	2.32	-0.02
7	Rumoi	(留萌)	8 44.9	1.39	- 106	47.1	-0.39	- 14	884	22.79	0.48
9	Asahigawa	(旭川)	49.3	1.67	- 137	32.7	-0.28	- 05	734	7.47	0.04
10	Sibetu	(標津)	8 02.8	1.54	-0.0232	57 14.2	-0.48	-0.007	26570	10.48	0.08
11	Nemuro	(根室)							411	81.84	1.86
13	Iwanai	(岩内)	8 59.5	1.85	-0.0120	56 54.9	-0.46	-0.008	27189	6.72	0.01
14	Siranuka	(白糠)	7 48.0	2.45	- 042	38.4	0.10	- 02	034	9.27	0.09
16	Tomikawa	(富川)	8 32.5	2.26	- 041	21.6	-0.58	- 09	383	16.55	0.18
17	Setana	(瀬棚)	7 59.0	0.05	-0.0312	56 10.9	-0.46	-0.007	27803	15.14	0.15
19	Hiroo	(広尾)	59.7	1.20	- 954	55 40.3	-1.48	- 92	536	22.68	0.29
20	Mori	(森)	8 08.5	2.08	- 064	56 08.9	0.28	- 05	579	7.49	0.03
23	Matumae	(松前)	10.0	2.25	- 015	54 52.4	0.02	- 04	28361	9.51	0.01
25	Nohezi	(野辺地)	05.9	1.47	- 124	31.3	-0.47	- 05	131	8.76	0.02
26	Azigasawa	(鯨ヶ沢)	7 47.9	1.76	-0.0077	54 41.1	-0.41	-0.006	28262	11.87	0.07
27	Ōdate	(大館)	52.9	1.82	- 77	53 59.2	-0.08	- 01	387	6.12	-0.05
28	Kuzi	(久慈)	19.6	1.83	- 81	55.9	-0.25	- 02	549	10.89	0.04
29	Akita	(秋田)	27.3	1.70	- 204	24.0	-0.56	- 08	849	30.09	0.61
32	Sakata	(酒田)	25.9	2.10	- 002	52 35.0	-0.24	- 01	29128	11.24	0.04
33	Onagawa	(女川)	6 56.9	2.43	0.0097	51 45.1	-0.71	-0.012	29124	25.83	0.43
34	Sendai	(仙台)	7 30.5	1.79	- 98	49.0	-1.07	- 22	182	29.86	0.51
35	Murakami	(村上市)	16.3	1.26	- 162	39.3	-1.22	- 23	572	32.74	0.54
36	Ryōtu	(両津)	21.5	1.76	- 022	47.8	-0.01	- 02	580	13.79	0.07
37	Aikawa	(相川)	25.7	1.93	- 044	49.8	-0.27	- 12	481	31.51	0.52
38	Niigata	(新潟)	7 23.4	2.05	0.0001	51 41.6	-0.16	0.001	29417	10.99	0.03
39	Wazima-1	(輪島-1)	08.9	1.72	- 28	15.9	0.03	- 05	943	10.70	-0.01
40	Wazima-2	(輪島-2)	6 51.1	1.09	- 232	03.1	-1.03	- 23	30098	30.44	0.53
42	Itoigawa	(糸魚川)	54.6	1.43	- 052	50 46.7	-0.31	- 02	29850	15.27	0.11
43	Kuroiso	(黒磯)	7 02.6	2.28	- 162	20.8	-0.46	- 09	898	33.34	0.55

44	Ueda	(植 田)	6	30.0	1.62	-0.0064	50	17.3	0.00	0.002	29694	13.34	0.11
46	Matuida	(松 井 田)		41.7	1.33	- 105	49	35.8	0.11	08	30175	11.69	0.05
48	Sioya	(塩 屋)		44.4	1.41	- 029	50	09.3	-0.23	00	232	9.22	0.00
50	Saigō-1	(西 郷-1)									984	8.56	-0.33
52	Hisiura	(菱 浦)	6	28.1	0.97	- 429	50	08.4	-0.89	-0.021	583	-31.69	-0.86
56	Miyazu	(宮 津)	6	30.3	1.32	-0.0065	49	05.9	-0.46	-0.002	30909	13.88	0.03
57	Iida	(飯 田)		21.0	1.71	- 77	48	45.3	-1.48	- 41	568	33.63	0.66
59	Obama-1	(小 浜-1)		37.8	1.90	46	49	04.6	-0.21	02	841	13.89	0.03
63	Izumo Imaiti	(出雲今市)		27.0	1.52	- 02		48.9	0.17	07	801	8.98	-0.02
64	Kamogawa	(鴨 川)		06.4	1.81	- 15	47	48.8	-0.68	- 03	393	14.79	0.10
65	Sasayama	(篠 山)	6	27.9	1.64	-0.0007	48	37.3	-0.47	-0.003	31056	7.19	-0.11
68	Miyosi	(三 次)		35.2	1.57	- 16		46.1	-0.16	03	298	14.94	0.05
69	Takahasi	(高 梁)		19.8	1.61	02		27.2	-0.18	02	389	14.72	0.05
70	Senzu	(泉 津)									30588	88.37	1.74
72	Motomura	(元 村)	5	54.7	8.95	0.1730					31525	35.46	0.00
74	Mabusi	(間 伏)	5	13.1	1.23	-0.0083	46	37.3	-1.76	-0.022	31655	28.39	0.37
75	Habu	(波 浮)	8	03.3	2.50	75	48	12.2	-1.56	- 25	248	25.26	0.42
79	Miyagawa	(宮 川)	6	02.2	1.51	37	47	45.1	-0.64	- 08	099	27.95	0.39
84	Nagasima	(長 島)	5	58.3	1.24	- 68		23.6	-0.19	04	249	7.34	-0.12
85	Izuhara-1	(厳 原-1)	6	11.8	2.33	186	48	23.1	-0.86	- 14	967	31.28	0.40
86	Izuhara-2	(厳 原-2)	6	11.9	2.58	0.0362	48	27.3	-0.76	-0.016	31936	33.47	0.47
87	Yamaguti	(山 口)		01.0	1.65	024		01.9	-0.20	01	800	20.68	0.15
89	Ako	(阿 古)	4	20.6	0.58	- 452		22.5	-1.53	- 76	29750	53.24	1.70
90	Tubota	(坪 田)	6	16.3	-0.96	-0.1219	47	57.8	-8.57	-0.383	30572	69.30	2.42
91	Imabari	(今 治)		00.4	1.51	0.0004		42.4	-0.36	-0.001	31622	21.36	0.19
92	Kawanoe	(川 之 江)	6	03.0	1.70	0.0020	47	30.9	-0.19	0.003	31642	13.06	0.01
97	Nakatu	(中 津)	5	53.4	1.67	44		27.7	-0.02	0.007	991	16.97	0.05
98	Ōzato	(大 里)		51.9	1.46	- 11	46	59.4	0.02	05	640	18.26	0.13
99	Karatu-1	(唐 津-1)		45.9	1.61	18	47	17.1	-0.54	- 01	32165	18.14	0.07
104	Uwazima	(宇 和 島)		42.5	1.65	27	46	40.4	-0.22	03	013	18.14	0.08
105	Yanagawa	(柳 川)	5	40.8	1.22	-0.0057	46	48.1	0.49	0.017	32313	10.09	-0.07
108	Ōgagō	(大 賀 郷)	6	30.7	1.54	- 124	44	26.6	-1.45	- 41	31830	34.31	0.73
109	Nakanogō	(中 之 郷)									30902	48.02	2.57
111	Saeki	(佐 伯)	5	27.6	0.82	-0.0096	46	30.8	-0.67	-0.005	32054	19.52	0.13
112	Miyazi	(宮 地)		12.5	1.37	- 04		41.4	-0.14	02	100	18.81	0.17

TABLE VI. THE VALUES OF COEFFICIENT a, b AND c OF EMPIRICAL FORMULA FOR EACH STATION

$$Mt = a + b(t - 1955.0) + c(t - 1955.0)^2$$

No.	Station	Declination			Dip			Horizontal Intensity		
		a	b	c	a	b	c	a	b	c
113	Kumamoto (熊本)	5 42.9	1.89	0.0044	46 17.3	-0.14	0.006	32233	6.73	-0.13
114	Simabara (島原)	33.6	1.87	67	23.8	-0.20	04	260	21.03	0.13
116	Tomie-1 (富江-1)	4 59.6	2.16	302	07.8	0.69	22	652	42.40	0.74
117	Tomie-2 (富江-2)	5 21.5	2.19	312	01.4	-2.29	- 82	33159	34.53	0.68
118	Tomitaka (富高)	22.8	1.16	- 045	45 41.3	-0.58	- 01	32462	17.32	0.06
119	Hitoyosi (人吉)	5 26.1	1.97	0.0105	45 44.0	0.46	0.011	32590	-21.41	-0.64
120	Usibuka (牛深)	12.9	1.00	- 095	33.7	-8.77	- 200	718	29.97	0.37
125	Makurazaki (枕崎)	4 41.7	1.94	158	44 25.7	-0.69	000	870	29.14	0.26
126	Nisino-omote (西之表)	42.4	1.17	- 001	43 27.4	-0.65	- 007	33144	32.98	0.45
131	Nase-2 (名瀬-2)	3 52.7	2.83	829	40 03.0	-1.21	- 013	34223	39.04	0.51

The derived distribution formula of B for declination is

$$B\delta = 1.'72 + 0.'00166 \Delta \varphi - 0.'00073 \Delta \lambda + 0.'00000027 \Delta \varphi^2 + 0.'00000173 \Delta \lambda^2 - 0.'00000228 \Delta \varphi \Delta \lambda,$$

for horizontal intensity is

$$B_H = 10.54r - 0.0150r \Delta \varphi - 0.0196r \Delta \lambda + 0.0000973r \Delta \varphi^2 + 0.0001202r \Delta \lambda^2 - 0.0001555r \Delta \varphi \Delta \lambda,$$

and for dip is

$$B\theta = -0.17' - 0.00042' \Delta \varphi + 0.00072' \Delta \lambda - 0.00000853' \Delta \varphi^2 - 0.00000747' \Delta \lambda^2 \\ + 0.00001425' \Delta \varphi \Delta \lambda.$$

And the derived distribution formula of C for declination is

$$C\delta = 0.'001 + 0.000048' \Delta \varphi - 0.000068' \Delta \lambda + 0.000000083' \Delta \varphi^2 + 0.000000141' \Delta \lambda^2 \\ - 0.000000238' \Delta \varphi \Delta \lambda,$$

for horizontal intensity is

$$C_H = -0.03r - 0.000097r \Delta \varphi + 0.000461r \Delta \lambda + 0.00000304r \Delta \varphi^2 + 0.00000354r \Delta \lambda^2 \\ - 0.00000498r \Delta \varphi \Delta \lambda,$$

and for dip is

$$C\theta = -0.'000 - 0.000029' \Delta \varphi + 0.000015' \Delta \lambda - 0.000000267' \Delta \varphi^2 - 0.000000179' \Delta \lambda^2 \\ + 0.000000446' \Delta \varphi \Delta \lambda.$$

$\Delta \varphi = (\varphi - 37^\circ)$ $\Delta \lambda = (\lambda - 135^\circ)$ expressed in minutes of angle.

The graphical expressions of B are shown in Fig. II, III and IV with red lines.

REDUCTION to 1955.0 and GEOGRAPHICAL DISTRIBUTION of MAGNETIC ELEMENTS

In construction of magnetic charts, daily mean values of magnetic elements at each station are used. But these values depend on the disturbance of external magnetic field, and so, it is important to eliminate influence of the external magnetic field. The effects of the daily variations of magnetic field may be eliminated by taking mean of 24 observations for a quiet day. However, the daily mean values on the ordinary days are not free from the residual effect of disturbance field such as sunspot-cycle, post-perturbation and etc. Therefore, for the purpose of eliminating these effects, the writers have introduced a next method by using the magnetic data in the Memambetsu and Kakioka (belonging to the Meteorological Agency) and Simosato (belong to the Hydrographic Office) Magnetic Observatory.

That is, the deviation of the normal field by the above longer periodic disturbance than the diurnal variation of Sq field were estimated using of a

running average method of 15 days from the date of three magnetic observations.

Reduction of these complicated daily mean values to the epoch 1955.0 was induced after those corrections. Geographical distribution of secular variation in the each field was analysed as noticed in the previous chapter, but the annual change of each magnetic element and its regionality is comparative small in our country at present, so for the reduction of the annual change at three observatories was used.

Table VII shows the observed values reduced at each station in the epoch of 1955.0. X_0 , Y_0 and Z_0 in this table are derived by the other magnetic elements δ , θ and H .

It is a well-known fact that the normal distribution of geomagnetic field in Japan and its neighbourhood may be expressed by the quadratic function of latitude and longitude and so the writers computed the following empirical formula based on the data shown in Table VII,

for declination

$$\delta = 7^\circ 07.'41 + 0.'3383 \Delta \varphi - 0.'0183 \Delta \lambda - 0.'0002539 \Delta \varphi^2 - 0.'0003211 \Delta \lambda^2 + 0.'0003641 \Delta \varphi \Delta \lambda,$$

$$\text{Pr} = \pm 7.'38$$

for dip

$$\theta = 51^\circ 03.'33 + 1.'2530 \Delta \varphi - 0.'1768 \Delta \lambda - 0.'0000454 \Delta \varphi^2 + 0.'0001867 \Delta \lambda^2 - 0.'0004248 \Delta \varphi \Delta \lambda,$$

$$\text{Pr} = \pm 8.'57$$

for horizontal intensity

$$H = 30320.7\gamma - 7.1737\gamma \Delta \varphi - 1.1861\gamma \Delta \lambda - 0.0029415\gamma \Delta \varphi^2 - 0.0013330\gamma \Delta \lambda^2 + 0.0039666\gamma \Delta \varphi \Delta \lambda,$$

$$\text{Pr} = \pm 85.4\gamma$$

for north component

$$X = 30077.0\gamma - 7.30798\gamma \Delta \varphi - 1.27079\gamma \Delta \lambda - 0.00195628\gamma \Delta \varphi^2 - 0.00039469\gamma \Delta \lambda^2 + 0.00211578\gamma \Delta \varphi \Delta \lambda,$$

$$\text{Pr} = \pm 59.5\gamma$$

for west component

$$Y = 3781.9\gamma + 2.598470\gamma \Delta \varphi - 0.67134\gamma \Delta \lambda - 0.00104430\gamma \Delta \varphi^2 - 0.00147672\gamma \Delta \lambda^2 - 0.00022064\gamma \Delta \varphi \Delta \lambda,$$

$$\text{Pr} = \pm 48.2\gamma$$

and for downward component

$$Z = 37436.9\gamma + 18.1529\gamma \Delta \varphi - 4.8647\gamma \Delta \lambda - 0.00187027\gamma \Delta \varphi^2 + 0.00038427\gamma \Delta \lambda^2 - 0.00157156\gamma \Delta \varphi \Delta \lambda.$$

$$\text{Pr} = \pm 83.4\gamma$$

$$\Delta \varphi = (\varphi - 37^\circ) \quad \Delta \lambda = (\lambda - 135^\circ) \quad \text{expressed in minutes of angle.}$$

In the above equations, Pr is the probable error. These equations are shown graphically in the Fig. II, III and IV, and V, VI and VII. The

Fig. II Lines of Equal Magnetic Declination (δ) and of Equal Annual Change for 1955.0

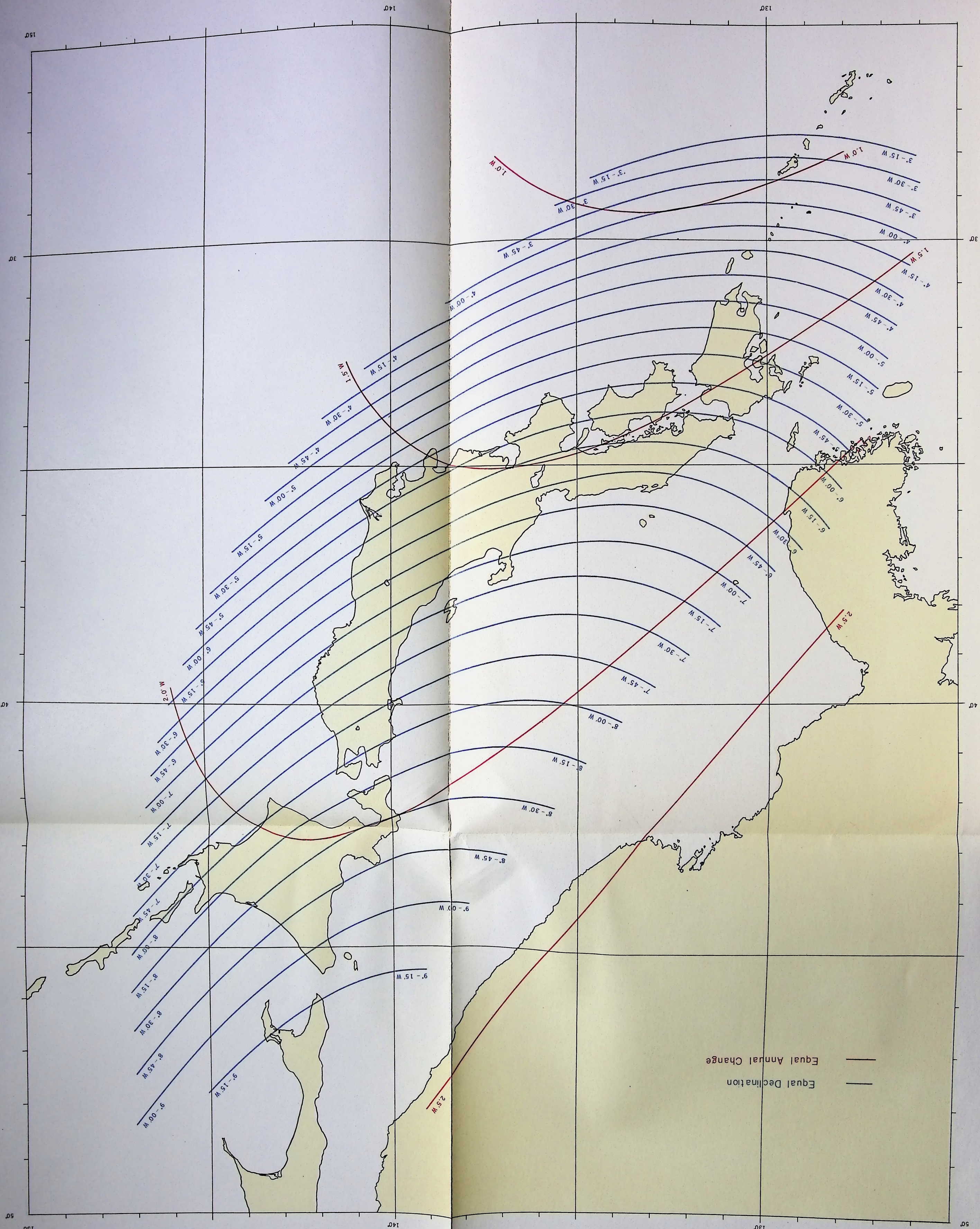


Fig. III

Lines of Equal Horizontal Intensity (H) and of Equal Annual Change for 1955.0

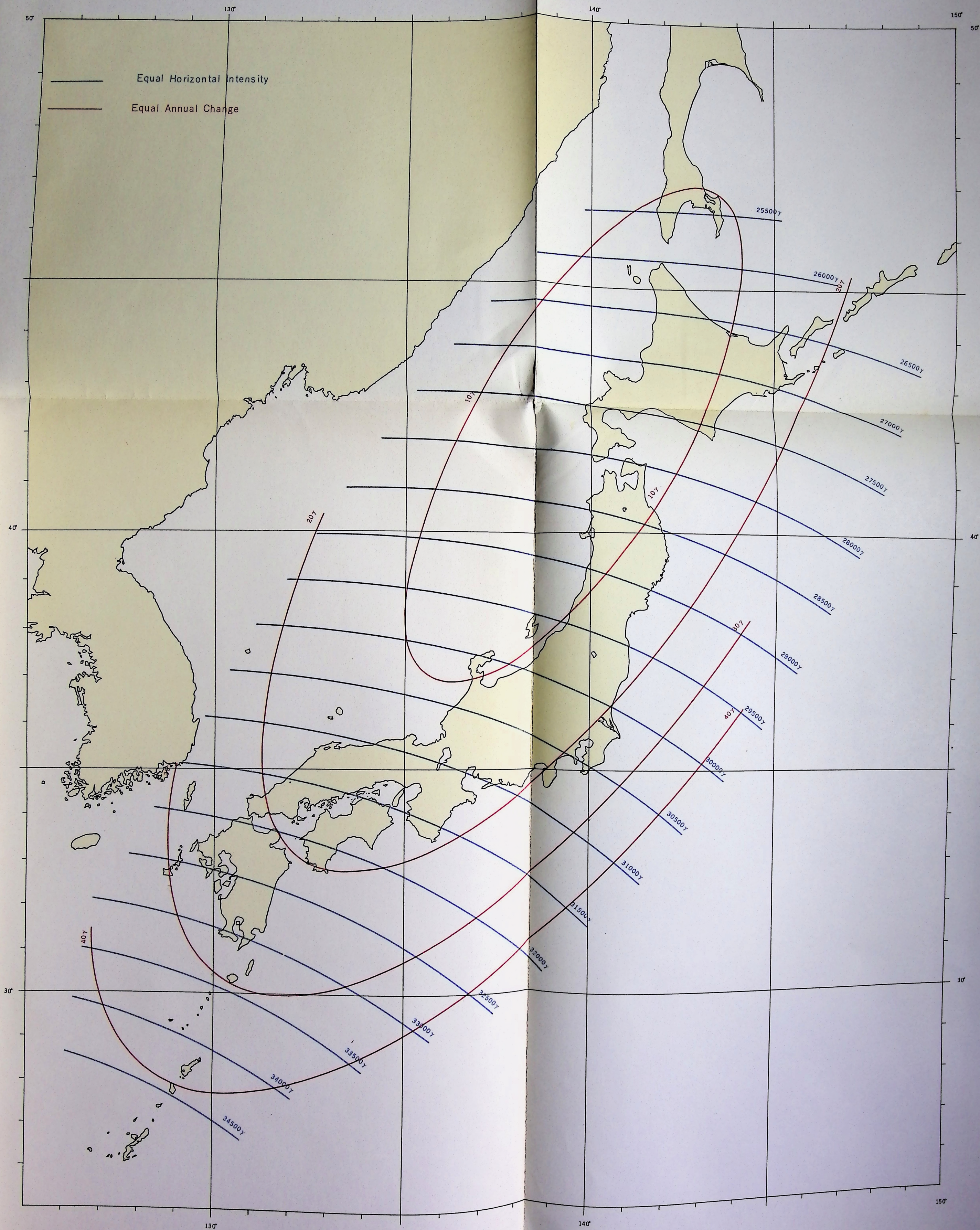


Fig. IV

Lines of Equal Magnetic Dip (θ) and of Equal Annual Change for 1955.0



Lines of Equal North Component (X) for 1955.0



Fig. VI

Lines of Equal West Component (Y) for 1955.0



Fig. VII

Lines of Equal Downward Component (Z) for 1955.0



magnetic elements δ , θ and H , the annual variation $\frac{d\delta}{dt}$, $\frac{d\theta}{dt}$ and $\frac{dH}{dt}$, and the annual accerelation $\frac{d^2\delta}{dt^2}$, $\frac{d^2\theta}{dt^2}$ and $\frac{d^2H}{dt^2}$ are also shown in Table VIII, by tabular representation. The deviations of these isomagnetic lines or the local magnetic anomalies are shown as differences between reduced and calculated values in Table IX.

TABLE VII. REDUCED VALUES TO THE EPOCH OF 1955.0 FOR EACH STATION

No.	Station	δ_0	θ_0	H_0	X_0	Y_0	Z_0
1	Wakkanai (稚内)	9 39.7	59 14.2	26176	25805	4393	43975
2	Kabuka (香深)	8 58.6	59 24.4	26044	25725	4064	44050
3	Esasi (枝幸)	8 44.0	58 49.8	26219	25915	3981	43344
4	Yagisiri (焼尻)	8 20.8	59 01.1	26146	25869	3795	43546
5	Monbetu (紋別)	8 49.8	57 50.9	26578	26263	4080	42284
6	Rausu (羅臼)	7 12.9	57 11.3	26598	26387	3341	41254
7	Rumoi (留萌)	8 38.6	57 43.5	26928	26622	4047	42637
8	Memambetu (女満別)	8 11.5	57 30.9	26579	26308	3787	41745
9	Asahigawa (旭川)	8 50.9	57 32.8	26785	26466	4120	42120
10	Sibetu (標津)	8 02.6	57 14.8	26611	26349	3723	41366
11	Nemuro (根室)	7 39.7	57 28.9	26386	26150	3518	41388
12	Kotoni (琴似)	8 53.5	56 42.3	27239	26912	4210	41475
13	Iwanai (岩内)	8 58.9	56 55.0	27161	26828	4240	41691
14	Siranuka (白糠)	7 44.9	56 31.2	27081	26834	3651	40946
15	Ikeda (池田)	7 59.9	56 29.2	27078	26815	3708	40890
16	Tomikawa (富川)	8 33.1	56 22.1	27411	27106	4076	41207
17	Setana (瀬棚)	7 59.6	56 08.9	27804	27534	3866	41452
18	Muroran (室蘭)	9 02.7	56 11.5	27889	27542	4384	41647
19	Hiroo (広尾)	7 59.1	55 40.6	27525	27258	3824	40315
20	Mori (森)	8 07.6	56 04.3	27659	27381	3910	41117
21	Esan (恵山)	7 17.1	55 32.7	27961	27735	3546	40752
22	Oma (大間)	8 35.3	55 24.6	27572	27263	4117	39983
23	Matumae (松前)	8 08.0	54 49.1	28430	28144	4022	40329
24	Tanabu (田名部)	8 30.7	55 01.1	28019	27710	4147	40043
25	Nohezi (野辺地)	8 05.2	54 27.7	28212	27931	3969	39496
26	Azigasawa (鰺ヶ沢)	7 50.4	54 40.0	28306	28041	3861	39929
27	Ōdate (大館)	7 52.1	53 58.3	28441	28173	3893	39105
28	Kuzi (久慈)	7 19.5	53 54.1	28599	28366	3646	39221
29	Akita (秋田)	7 24.8	53 22.9	28835	28594	3720	38800
30	Morioka (盛岡)	7 20.4	52 56.4	28801	28565	3680	38137

31	Miyako	(宮古)	7	27.9	53	18.7	28614	28371	3718	38405
32	Sakata	(酒田)	7	24.5	52	31.0	29213	28969	3767	38094
33	Onagawa	(女川)	6	53.0	51	43.5	29126	28916	3491	36913
34	Sendai	(仙台)	7	30.4	51	49.4	29166	28916	3810	37094
35	Murakami	(村上)	7	16.1	51	38.4	29550	29313	3739	37336
36	Ryōtu	(両津)	7	21.9	51	43.4	29646	29401	3800	37570
37	Aikawa	(相川)	7	24.4	51	49.4	29452	29206	3797	37458
38	Niigata	(新潟)	7	19.7	51	36.7	29512	29271	3764	37250
39	Wazima-1	(輪島-1)	7	09.3	51	12.1	30036	29802	3741	37359
40	Wazima-2	(輪島-2)	6	50.6	51	01.3	30127	29912	3590	37233
41	Tōkamati	(十日町)	6	48.5	50	47.7	29951	29740	3551	36717
42	Itoigawa	(糸魚川)	6	55.1	50	43.1	29919	29701	3604	36578
43	Kuroiso	(黒磯)	7	02.8	50	17.8	29919	29693	3670	36033
44	Ueda	(植田)	6	30.1	50	13.2	29741	29550	3368	35722
45	Toyama	(富山)	6	55.0	50	27.3	30102	29883	3625	36458
46	Matuida	(松井田)	6	42.5	49	32.1	30242	30035	3533	35453
47	Mito	(水戸)	6	13.1	49	30.6	30050	29873	3255	35196
48	Sioya	(塩屋)	6	47.1	50	05.7	30389	30176	3590	36338
49	Saigō-1	(西郷-1)	6	48.7	50	25.2	30584	30368	3627	36996
50	Saigō-2	(西郷-2)	6	37.0	51	57.2	30996	30790	3572	39607
51	Takayama	(高山)	6	30.0	49	31.2	30520	30324	3455	35760
52	Hisiura	(菱浦)	6	29.6	50	07.8	30639	30442	3465	36683
53	Takehu	(武生)	6	42.6	49	18.7	30813	30602	3600	35838
54	Nirasaki	(蕨崎)	6	25.4	49	01.4	30378	30187	3399	34975
55	Iioka	(飯岡)	5	54.8	48	20.8	30448	30286	3137	34230
56	Miyazu	(宮津)	6	30.4	49	05.6	30903	30704	3502	35667
57	Iida	(飯田)	6	21.3	48	42.9	30576	30388	3384	34822
58	Obama-1	(小浜-1)	6	37.2	48	59.4	30908	30702	3563	35543
59	Obama-2	(小浜-2)	6	37.0	48	59.4	30906	30700	3561	35541
60	Tottori	(鳥取)	6	41.7	49	24.5	31034	30822	3618	36219
61	Yonago	(米子)	6	32.5	49	36.4	30948	30746	3526	36372
62	Hozumi	(穂積)	6	22.2	48	42.2	30835	30645	3421	35103
63	Imaiti	(出雲今市)	6	25.8	49	46.2	30873	30679	3457	36494
64	Kamogawa	(鴨川)	6	06.1	47	44.5	30563	30390	3249	33637
65	Sasayama	(篠山)	6	28.5	48	37.2	31047	30849	3501	35241

TABLE VII. REDUCED VALUES TO THE EPOCH OF 1955.0 FOR EACH STATION-CONTINUED

No.	Station	δ_0	θ_0	H_0	X_0	Y_0	Z_0
66	Hamada (浜田)	$6^{\circ} 36.4'$	$49^{\circ} 13.5'$	31528^r	31319^r	3627^r	36558^r
67	Himezi (姫路)	$6^{\circ} 19.2'$	$48^{\circ} 25.7'$	31248	31058	3440	35231
68	Miyosi (三次)	$6^{\circ} 35.8'$	$48^{\circ} 46.2'$	31293	31086	3595	35708
69	Takahasi (高梁)	$6^{\circ} 20.4'$	$48^{\circ} 27.3'$	31386	31194	3466	35419
70	Senzu (泉津)	$5^{\circ} 16.6'$	$48^{\circ} 18.9'$	30596	30466	2814	34358
71	Iga Ueno (伊賀上野)	$6^{\circ} 14.9'$	$48^{\circ} 04.8'$	31073	30888	3382	34607
72	Motomura (元村)	$5^{\circ} 52.6'$	$47^{\circ} 58.4'$	31769	31602	3253	35250
73	Utumi (内海)	$6^{\circ} 11.5'$	$48^{\circ} 02.1'$	30976	30795	3341	34445
74	Mabusi (間伏)	$5^{\circ} 12.6'$	$46^{\circ} 38.8'$	31647	31516	2874	33520
75	Habu (波浮)	$8^{\circ} 02.1'$	$48^{\circ} 13.7'$	31258	30951	4369	34995
76	Simoda (下田)	$5^{\circ} 43.6'$	$47^{\circ} 19.3'$	30880	30726	3081	33490
77	Hukue (福江)	$6^{\circ} 07.1'$	$47^{\circ} 48.5'$	31035	30858	3308	34237
78	Omaezaki (御前崎)	$5^{\circ} 52.4'$	$47^{\circ} 31.1'$	30975	30812	3170	33825
79	Miyagawa (宮川)	$6^{\circ} 02.9'$	$47^{\circ} 43.8'$	31113	30940	3278	34229
80	Hukuyama (福山)	$6^{\circ} 11.8'$	$48^{\circ} 04.5'$	31527	31343	3403	35107
81	Senzaki (仙崎)	$6^{\circ} 02.3'$	$48^{\circ} 15.6'$	31920	31743	3358	35776
82	Sumoto (洲本)	$6^{\circ} 08.4'$	$47^{\circ} 43.8'$	31381	31201	3356	34524
83	Hirosima (広島)	$6^{\circ} 03.9'$	$47^{\circ} 59.8'$	31701	31524	3349	35203
84	Nagasima (長島)	$5^{\circ} 58.7'$	$47^{\circ} 23.8'$	31234	31064	3253	33963
85	Izuhara-1 (厳原-1)	$6^{\circ} 16.9'$	$48^{\circ} 23.3'$	31982	31793	3499	36007
86	Izuhara-2 (厳原-2)	$6^{\circ} 13.5'$	$48^{\circ} 26.8'$	31938	31750	3463	36032
87	Yamaguti (山口)	$6^{\circ} 03.8'$	$47^{\circ} 59.5'$	31852	31674	3364	35365
88	Miyake Izu (三宅伊豆)	$4^{\circ} 56.0'$	$48^{\circ} 33.8'$	29575	29465	2543	33503
89	Ako (阿古)	$4^{\circ} 18.9'$	$48^{\circ} 21.4'$	29761	29677	2239	33470
90	Tubota (坪田)	$6^{\circ} 13.9'$	$47^{\circ} 49.9'$	30596	30415	3321	33780
91	Imabari (今治)	$6^{\circ} 03.2'$	$47^{\circ} 39.2'$	31699	31522	3343	34780
92	Kawanoe (川之江)	$6^{\circ} 03.7'$	$47^{\circ} 31.0'$	31647	31470	3342	34557
93	Totugawa (十津川)	$5^{\circ} 53.6'$	$47^{\circ} 09.2'$	31402	31236	3224	33856
94	Katumoto (勝本)	$5^{\circ} 59.0'$	$48^{\circ} 04.9'$	31940	31766	3329	35575
95	Minabe (南部)	$5^{\circ} 55.0'$	$46^{\circ} 58.5'$	31537	31369	3251	33790

96	Hukuoka	(福 岡)	5	38.7	47	37.0	31946	31791	3142	35006
97	Nakatu	(中 津)	5	56.8	47	23.9	32057	31885	3321	34860
98	Ōzato	(大 里)	5	53.2	46	55.9	31716	31549	3253	33930
99	Karatu-1	(唐 津-1)	5	50.1	47	15.1	32204	32037	3274	34840
100	Karatu-2	(唐 津-2)	5	48.6	47	17.8	32157	31992	3255	34844
101	Susaki	(須 崎)	5	49.4	46	50.1	31858	31694	3232	33967
102	Misaki	(三 崎)	5	48.5	46	55.1	31998	31834	3238	34216
103	Ōita	(大 分)	5	34.8	46	01.1	32719	32564	3181	33903
104	Uwazima	(宇 和 島)	5	43.1	46	40.5	32036	31877	3192	33966
105	Yanagawa	(柳 川)	5	41.2	46	48.3	32318	32159	3202	34421
106	Haiki	(早 岐)	5	39.7	46	48.3	32409	32251	3197	34518
107	Mitune	(三 根)	7	26.7	45	19.7	30513	30256	3954	30865
108	Ōgagō	(大 賀 郷)	6	29.4	44	25.7	31831	31627	3598	31202
109	Nakanogō	(中 之 郷)	4	05.1	46	28.4	30874	30796	2199	32504
110	Nakamura	(中 村)	5	37.5	46	18.3	32085	31931	3145	33581
111	Saeki	(佐 伯)	5	29.5	46	30.3	32098	31951	3072	33830
112	Miyazi	(宮 地)	5	14.6	46	40.9	32150	32015	2938	34095
113	Kumamoto	(熊 本)	5	43.8	46	17.5	32234	32073	3218	33721
114	Simabara	(島 原)	5	36.2	46	20.0	32336	32181	3157	33877
115	Hukue	(福 江)	5	32.2	45	50.9	32684	32532	3153	33666
116	Tomie-1	(富 江-1)	5	02.8	46	05.2	32657	32530	2873	33920
117	Tomie-2	(富 江-2)	5	23.6	46	00.9	33129	32982	3114	34324
118	Tomitaka	(富 高)	5	23.2	45	40.8	32476	32333	3049	33256
119	Hitoyosi	(人 吉)	5	26.6	45	44.3	32550	32403	3088	33400
120	Usibuka	(牛 深)	5	13.0	45	30.8	32745	32609	2977	33337
121	Miyazaki	(宮 崎)	5	15.5	45	04.6	32717	32579	2999	32805
122	Nakakosiki	(中 飫 島)	4	48.7	45	12.9	32955	32839	2764	33203
123	Kagosima	(鹿 見 島)	4	46.0	44	32.4	32884	32770	2733	32360
124	Sibusi	(志 布 志)	5	01.0	44	25.1	32924	32798	2879	32262
125	Makurazaki	(枕 崎)	4	41.9	44	27.7	32945	32834	2699	32332
126	Nisino-omote	(西 之 表)	4	44.1	43	25.9	33175	33062	2739	31407
127	Miyanoura	(宮 之 浦)	4	41.0	42	58.7	33364	33253	2724	31089
128	Minamitane	(南 種 子)	4	35.8	43	03.7	33219	33112	2662	31044
129	Anbō	(安 房)	4	38.6	42	47.4	33367	33257	2701	30887
130	Nase--1	(名 瀬-1)	3	51.5	40	02.6	34076	33999	2293	28637

TABLE VII. REDUCED VALUES TO THE EPOCH OF 1955.0 FOR EACH STATION-CONTINUED

No.	Station	δ_0	θ_0	H_0	X_0	Y_0	Z_0
131	Nase-2	$3^{\circ} 55.1'$	$40^{\circ} 02.6'$	34276^r	34196^r	2342^r	28805^r
132	Naon	$3^{\circ} 57.4'$	$39^{\circ} 51.6'$	34300	34218	2367	28639
133	Koniya	$3^{\circ} 54.3'$	$39^{\circ} 44.8'$	34372	34292	2341	28584
	(名 瀬-2)						
	(名 音)						
	(古 仁 屋)						

TABLE VIII-1. TABULAR REPRESENTATION ON THE DECLINATION δ (1955.0)

$\varphi \backslash \lambda$	128°	129°	130°	131°	132°	133°	134°	135°	136°	137°	138°	139°	140°	141°	142°	143°	144°	145°	146°	147°
46°	o /	o /	o /	o /	o /	o /	o /	o /	o /	o /	o /	o /	9-20.6	9-18.6	9-14.3	9-07.6	8-58.7	8-47.4	8-33.8	8-17.9
45°												9-10.3	9-09.3	9-05.0	9-00.3	8-52.7	8-42.1	8-29.5	8-14.6	7-57.4
44°											8-58.5	8-58.5	8-56.2	8-51.5	8-44.6	8-35.3	8-23.7	8-09.8	7-53.6	7-35.1
43°											8-46.2	8-44.8	8-41.2	8-35.2	8-27.0	8-16.4	8-03.5	7-48.3	7-30.8	7-11.0
42°											8-32.0	8-29.4	8-24.4	8-17.1	8-07.6	7-55.7	7-41.5	7-25.0	7-06.1	6-45.0
41°										8-17.6	8-16.0	8-12.0	8-05.8	7-57.2	7-46.3	7-33.1	7-17.6	6-59.8	6-39.7	
40°										8-01.1	7-58.2	7-52.9	7-45.3	7-35.4	7-23.3	7-08.7	6-51.9	6-32.8	6-11.3	
39°								7-44.3	7-44.7	7-42.8	7-38.5	7-31.9	7-23.1	7-11.9	6-58.4	6-42.5	6-24.4	6-04.0	5-41.2	
38°					7-15.8	7-21.7	7-25.4	7-26.8	7-25.8	7-22.6	7-17.0	7-09.1	6-58.9	6-46.4	6-31.6	6-14.5	5-55.1	5-33.3	5-09.2	
37°				6-53.3	7-00.3	7-05.0	7-07.4	7-07.4	7-05.2	7-00.6	6-53.7	6-44.5	6-33.0	6-19.2	6-03.1	5-44.6	5-23.9			
36°			6-29.4	6-37.3	6-43.0	6-46.4	6-47.5	6-46.2	6-42.6	6-36.8	6-28.6	6-18.1	6-05.2	5-50.1	5-32.7	5-12.9	4-50.9			
35°	5-52.6	6-03.9	6-12.9	6-19.6	6-23.9	6-26.0	6-25.7	6-23.2	6-18.3	6-11.1	6-01.6	5-49.8	5-35.7	5-19.2	5-00.5	4-39.4	4-16.0			
34°	5-36.9	5-46.9	5-54.6	5-59.9	6-03.0	6-03.7	6-02.2	5-58.3	5-52.1	5-43.6	5-32.8	5-19.7	5-04.2	4-46.5	4-26.4	4-04.1				
33°	5-19.4	5-28.0	5-34.4	5-38.5	5-40.2	5-39.7	5-36.8	5-31.6	5-24.1	5-14.3	5-02.2	4-47.7	4-31.0	4-11.9	3-50.6					
32°	5-00.0	5-07.4	5-12.4	5-15.2	5-15.6	5-13.8	5-09.6	5-03.1	4-54.3	4-43.1	4-29.7	4-14.0	3-55.9	3-35.5						
31°	4-38.8	4-44.9	4-48.6	4-50.1	4-49.2	4-46.0	4-40.5	4-32.7	4-22.6	4-10.2										
30°	4-15.8	4-20.6	4-23.0	4-23.1	4-21.0	4-16.5	4-09.7	4-00.5												
29°	3-51.0	3-54.4	3-55.6	3-54.4	3-50.9	3-45.1	3-37.0													
28°	3-24.3	3-26.5	3-26.3	3-23.8	3-20.0															
27°	2-55.8	2-56.7	2-55.2	2-51.4	2-45.3															

TABLE VIII-2. TABULAR REPRESENTATION OF THE DIP θ (1955.0)

$\varphi \backslash \lambda$	128°	129°	130°	131°	132°	133°	134°	135°	136°	137°	138°	139°	140°	141°	142°	143°	144°	145°	146°	147°		
46°	° /	° /	° /	° /	° /	° /	° /	° /	° /	° /	° /	° /	° /	° /	60-21.7	60-04.7	59-49.1	59-34.8	59-21.8	59-10.2	59-00.0	58-51.1
45°													59-33.7	59-16.9	59-01.5	58-47.4	58-34.6	58-23.2	58-13.1	58-04.4	57-57.0	
44°											58-43.7	58-27.1	58-11.8	57-57.9	57-45.3	57-34.1	57-24.2	57-15.7	57-08.5	57-02.6		
43°											57-35.2	57-20.2	57-06.4	56-54.0	56-43.0	56-33.3	56-24.9	56-17.9	56-12.3	56-07.9		
42°											56-26.4	56-12.9	56-00.7	55-49.8	55-40.3	55-25.3	55-19.8	55-15.7	55-12.9			
41°										55-30.7	55-17.3	55-05.3	54-54.6	54-45.3	54-37.3	54-30.7	54-25.4	54-21.4	54-18.8			
40°										54-19.7	54-07.9	53-57.4	53-48.2	53-40.4	53-34.0	53-28.9	53-25.1	53-22.7	53-21.6			
39°								53-33.0	53-20.1	53-08.4	52-58.1	52-49.1	52-41.5	52-35.3	52-30.3	52-26.7	52-24.5	52-23.6	52-24.1			
38°					53-00.8	52-45.3	52-31.2	52-18.4	52-06.9	51-56.8	51-48.0	51-40.6	51-34.5	51-29.7	51-26.3	51-24.3	51-23.6	51-24.2	51-26.2			
37°				51-56.5	51-41.2	51-27.2	51-14.6	51-03.3	50-53.4	50-44.8	50-37.6	50-31.7	50-27.1	50-23.9	50-22.0	50-21.5	50-22.3					
36°			50-50.2	50-35.0	50-21.3	50-08.8	49-57.8	49-48.0	49-39.6	49-32.5	49-26.8	49-22.4	49-19.4	49-17.7	49-17.4	49-18.4	49-20.7					
35°	49-58.1	49-41.8	49-26.9	49-13.3	49-01.0	48-50.1	48-40.5	48-32.3	48-25.4	48-19.9	48-15.7	48-12.9	48-11.4	48-11.2	48-12.4	48-15.0	48-18.8					
34°	48-31.4	48-16.6	48-03.2	47-51.1	47-40.4	47-31.0	47-23.0	47-16.3	47-11.0	47-07.0	47-04.3	47-03.0	47-03.0	47-04.4	47-07.1	47-11.2						
33°	47-04.3	46-51.1	46-39.2	46-28.7	46-19.5	46-11.7	46-05.2	46-00.0	45-56.2	45-53.7	45-52.6	45-52.8	45-54.4	45-57.3	46-01.5							
32°	45-37.0	45-25.3	45-14.9	45-05.9	44-58.3	44-51.9	44-47.0	44-43.3	44-41.1	44-40.1	44-40.5	44-42.3	44-45.3	44-50.0								
31°	44-09.3	43-59.1	43-50.3	43-42.8	43-36.7	43-31.9	43-28.5	43-26.4	43-25.6	43-26.2												
30°	42-41.3	42-32.6	42-25.4	42-19.4	42-14.8	42-11.5	42-09.6	42-09.1														
29°	41-12.9	41-05.8	41-00.1	40-55.7	40-52.6	40-50.8	40-50.5															
28°	39-44.3	39-38.6	39-34.5	39-31.6	39-30.0																	
27°	38-15.3	38-11.2	38-08.5	38-07.2	38-07.2																	

TABLE VIII-3. TABULAR REPRESENTATION OF THE HORIZONTAL INTENSITY H (1955.0)

$\varphi \backslash \lambda$	128°	129°	130°	131°	132°	133°	134°	135°	136°	137°	138°	139°	140°	141°	142°	143°	144°	145°	146°	147°
46°	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r
45°												26295	26295	26285	26266	26237	26199	26150	26093	26025
44°											26832	26827	26813	26789	26755	26712	26659	26597	26525	26443
43°											27357	27338	27310	27271	27223	27166	27099	27022	26936	26840
42°											27861	27828	27785	27732	27670	27599	27517	27426	27326	27216
41°										28382	28344	28297	28239	28173	28096	28010	27924	27809	27694	
40°										28858	28806	28744	28672	28591	28501	28400	28290	28171	28042	
39°								29417	29370	29313	29246	29170	29084	28989	28884	28769	28645	28511	28368	
38°					30007	29974	29932	29880	29818	29747	29666	29575	29475	29366	29246	29117	28979	28831	28673	
37°				30529	30491	30444	30387	30321	30245	30159	30064	29959	29845	29721	29587	29444	29291			
36°			31048	31005	30954	30892	30821	30730	30650	30550	30441	30322	30193	30055	29907	29750	29582			
35°	31602	31565	31518	31461	31395	31319	31234	31139	31034	30920	30797	30663	30521	30368	30206	30034	29853			
34°	32080	32028	31967	31896	31815	31725	31626	31517	31398	31269	31131	30984	30827	30660	30483	30297				
33°	32536	32470	32394	32308	32215	32110	31996	31873	31740	31597	31445	31283	31111	30930	30739					
32°	32971	32891	32801	32702	32593	32474	32346	32208	32061	31904	31737	31561	31375	31180						
31°	33385	33290	33186	33073	32949	32816	32674	32522	32360	32189										
30°	33777	33669	33550	33422	33285	33138	32981	32815												
29°	34149	34026	33893	33751	33599	33438	33267													
28°	34499	34362	34215	34059	33893															
27°	34829	34677	34516	34345	34165															

REDUCTION TO 1955.0 AND GEOGRAPHICAL DISTRIBUTION OF MAGNETIC ELEMENTS

TABLE VIII-4. TABULAR REPRESENTATION OF THE ANNUAL VARIATION $\frac{d\delta}{dt}$ (1955.0) (in minutes per year)

$\varphi \backslash \lambda$	128°	129°	130°	131°	132°	133°	134°	135°	136°	137°	138°	139°	140°	141°	142°	143°	144°	145°	146°	147°
46°													2.26	2.21	2.18	2.15	2.14	2.14	2.15	2.18
45°												2.24	2.19	2.15	2.12	2.10	2.10	2.11	2.13	2.16
44°											2.22	2.16	2.12	2.08	2.06	2.05	2.06	2.08	2.11	2.15
43°											2.13	2.08	2.04	2.02	2.01	2.01	2.02	2.04	2.08	2.13
42°											2.04	2.00	1.97	1.96	1.95	1.96	1.98	2.02	2.06	2.12
41°										2.01	1.96	1.93	1.91	1.90	1.90	1.92	1.95	1.99	2.05	
40°										1.92	1.88	1.86	1.84	1.84	1.85	1.88	1.92	1.97	2.03	
39°								1.92	1.87	1.83	1.80	1.78	1.78	1.79	1.81	1.84	1.89	1.94	2.01	
38°					2.03	1.95	1.88	1.82	1.78	1.74	1.72	1.71	1.72	1.73	1.76	1.80	1.86	1.92	2.00	
37°				2.00	1.91	1.83	1.77	1.72	1.68	1.66	1.65	1.65	1.66	1.68	1.72	1.77	1.83			
36°			1.96	1.86	1.78	1.72	1.66	1.62	1.59	1.57	1.57	1.58	1.60	1.63	1.68	1.74	1.81			
35°	2.02	1.91	1.82	1.73	1.66	1.61	1.56	1.53	1.50	1.50	1.50	1.52	1.54	1.58	1.64	1.71	1.78			
34°	1.87	1.77	1.68	1.61	1.54	1.49	1.46	1.43	1.42	1.42	1.43	1.45	1.49	1.54	1.60	1.68				
33°	1.72	1.63	1.55	1.48	1.43	1.39	1.36	1.34	1.33	1.34	1.36	1.39	1.44	1.50	1.57					
32°	1.57	1.49	1.42	1.36	1.31	1.28	1.26	1.25	1.25	1.27	1.29	1.34	1.39	1.45						
31°	1.42	1.35	1.29	1.24	1.20	1.17	1.16	1.16	1.17	1.19										
30°	1.28	1.21	1.16	1.12	1.09	1.07	1.06	1.07												
29°	1.14	1.08	1.03	1.00	0.98	0.97	0.97													
28°	1.00	0.95	0.91	0.88	0.87															
27°	0.86	0.82	0.79	0.77	0.76															

TABLE VIII-5. TABULAR REPRESENTATION OF THE ANNUAL VARIATION $\frac{d\theta}{dt}$ (1955.0) (in minutes per year)

λ φ	128°	129°	130°	131°	132°	133°	134°	135°	136°	137°	138°	139°	140°	141°	142°	143°	144°	145°	146°	147°
46°													-1.03	-0.82	-0.67	-0.57	-0.52	-0.52	-0.58	-0.70
45°												-0.95	-0.74	-0.58	-0.48	-0.43	-0.43	-0.49	-0.60	-0.77
44°											-0.89	-0.67	-0.51	-0.41	-0.35	-0.35	-0.41	-0.52	-0.68	-0.90
43°											-0.62	-0.45	-0.34	-0.29	-0.29	-0.34	-0.45	-0.61	-0.82	-1.09
42°											-0.41	-0.30	-0.24	-0.23	-0.28	-0.39	-0.54	-0.76	-1.02	-1.34
41°										-0.37	-0.26	-0.20	-0.19	-0.24	-0.34	-0.50	-0.70	-0.97	-1.28	
40°										-0.24	-0.17	-0.16	-0.21	-0.31	-0.46	-0.67	-0.93	-1.24	-1.61	
39°								-0.34	-0.22	-0.16	-0.15	-0.19	-0.29	-0.44	-0.64	-0.90	-1.21	-1.57	-1.99	
38°					-0.75	-0.52	-0.35	-0.23	-0.16	-0.14	-0.18	-0.28	-0.43	-0.63	-0.88	-1.19	-1.55	-1.97	-2.44	
37°				-0.77	-0.54	-0.36	-0.24	-0.17	-0.15	-0.19	-0.28	-0.43	-0.63	-0.88	-1.19	-1.55	-1.96			
36°			-0.81	-0.57	-0.39	-0.27	-0.19	-0.18	-0.21	-0.30	-0.44	-0.64	-0.89	-1.19	-1.55	-1.96	-2.43			
35°	-1.14	-0.85	-0.62	-0.44	-0.31	-0.23	-0.21	-0.24	-0.33	-0.47	-0.66	-0.91	-1.21	-1.57	-1.98	-2.44	-2.96			
34°	-0.91	-0.67	-0.49	-0.36	-0.28	-0.26	-0.29	-0.37	-0.51	-0.70	-0.94	-1.24	-1.79	-2.00	-2.46	-2.98				
33°	-0.74	-0.56	-0.42	-0.34	-0.32	-0.34	-0.43	-0.56	-0.75	-0.99	-1.29	-1.64	-2.04	-2.50	-3.01					
32°	-0.64	-0.50	-0.42	-0.39	-0.41	-0.49	-0.63	-0.81	-1.05	-1.35	-1.69	-2.10	-2.55	-3.06						
31°	-0.59	-0.50	-0.47	-0.50	-0.57	-0.70	-0.89	-1.12	-1.42	-1.76										
30°	-0.60	-0.57	-0.59	-0.67	-0.79	-0.97	-1.21	-1.50												
29°	-0.68	-0.70	-0.77	-0.90	-1.07	-1.31	-1.59													
28°	-0.82	-0.89	-1.01	-1.19	-1.42															
27°	-1.02	-1.14	-1.31	-1.54	-1.82															

TABLE VIII-6. TABULAR REPRESENTATION OF THE ANNUAL VARIATION $\frac{dH}{dt}$ (1955.0) (in gammas per year)

$\varphi \backslash \lambda$	128°	129°	130°	131°	132°	133°	134°	135°	136°	137°	138°	139°	140°	141°	142°	143°	144°	145°	146°	147°
46°													10.55	9.10	8.51	8.78	9.92	11.93	14.81	18.55
45°												10.06	8.30	7.40	7.37	8.21	9.91	12.48	15.91	20.21
44°											10.01	7.94	6.74	6.41	6.94	8.33	10.59	13.72	17.72	22.57
43°											8.03	6.53	5.89	6.11	7.20	9.16	11.98	15.67	20.22	25.64
42°											6.76	5.82	5.73	6.52	8.17	10.68	14.07	18.31	23.43	29.41
41°										7.44	6.19	5.80	6.28	7.63	9.84	12.91	16.85	21.66	27.33	
40°										7.01	6.32	6.49	7.53	9.43	12.20	15.84	20.34	25.71	31.94	
39°								10.14	7.68	7.28	7.15	7.88	9.48	11.94	15.27	19.47	24.53	30.46	37.25	
38°					19.10	15.20	12.16	9.99	8.69	8.25	8.67	9.97	12.13	15.15	19.04	23.79	29.42	35.90	43.25	
37°				22.17	17.97	14.63	12.15	10.54	9.80	9.92	10.90	12.76	15.48	19.06	23.51	28.82	35.00			
36°			25.70	21.19	17.54	14.76	12.84	11.79	11.61	12.29	13.83	16.25	19.52	23.67	28.68	34.55	41.29			
35°	35.35	29.67	24.85	20.90	17.81	15.59	14.23	13.74	14.12	15.36	17.46	20.44	24.28	28.98	34.55	40.98	48.28			
34°	34.08	28.96	24.70	21.31	18.78	17.12	16.32	16.39	17.33	19.13	21.79	25.33	29.73	34.99	41.12	48.11				
33°	33.52	28.95	25.25	22.42	20.45	19.35	19.12	19.74	21.24	23.60	26.83	30.92	35.88	41.70	48.39					
32°	33.65	29.65	26.51	24.23	22.83	22.28	22.61	23.80	25.85	28.77	32.56	37.21	42.73	49.11						
31°	34.48	31.04	28.46	26.75	25.90	25.92	26.80	28.55	31.16	34.64										
30°	36.02	33.13	31.11	29.96	29.67	30.25	31.69	34.00												
29°	38.25	35.93	34.47	33.87	34.15	35.28	37.29													
28°	41.19	37.33	38.52	38.49	39.32															
27°	44.82	43.62	43.28	43.80	45.20															

TABLE VIII-7. TABULAR REPRESENTATION OF THE ANNUAL ACCELERATION $\frac{1}{2} \frac{d^2\delta}{dt^2}(1955.0)$ (in minutes per square year)

$\varphi \backslash \lambda$	128°	129°	130°	131°	132°	133°	134°	135°	136°	137°	138°	139°	140°	141°	142°	143°	144°	145°	146°	147°
46°													0.0049	-0.0014	-0.0066	-0.0107	-0.0139	-0.0160	-0.0172	-0.0173
45°												0.0075	0.0012	-0.0042	-0.0085	-0.0118	-0.0141	-0.0154	-0.0157	-0.0150
44°											0.0102	0.0036	-0.0018	-0.0064	-0.0099	-0.0123	-0.0138	-0.0142	-0.0137	-0.0121
43°											0.0060	0.0003	-0.0044	-0.0080	-0.0106	-0.0122	-0.0128	-0.0124	-0.0100	-0.0085
42°											-0.0024	-0.0025	-0.0063	-0.0090	-0.0108	-0.0116	-0.0113	-0.0100	-0.0077	-0.0044
41°										0.0042	-0.0006	-0.0046	-0.0075	-0.0095	-0.0104	-0.0102	-0.0091	-0.0070	-0.0039	
40°										0.0011	-0.0031	-0.0062	-0.0082	-0.0093	-0.0094	-0.0084	-0.0064	-0.0034	0.0006	
39°								0.0080	0.0027	-0.0016	-0.0049	-0.0071	-0.0083	-0.0085	-0.0077	-0.0059	-0.0031	0.0008	0.0057	
38°					0.0236	0.0161	0.0096	0.0042	-0.0003	-0.0037	-0.0061	-0.0075	-0.0078	-0.0072	-0.0055	-0.0028	0.0009	0.0056	0.0113	
37°				0.0254	0.0178	0.0112	0.0056	0.0010	-0.0026	-0.0051	-0.0067	-0.0072	-0.0067	-0.0052	-0.0027	0.0009	0.0054			
36°			0.0272	0.0194	0.0126	0.0069	0.0021	-0.0016	-0.0043	-0.0061	-0.0066	-0.0064	-0.0050	-0.0027	0.0007	0.0052	0.0105			
35°	0.0379	0.0289	0.0210	0.0140	0.0081	0.0032	-0.0007	-0.0036	-0.0054	-0.0063	-0.0061	-0.0049	-0.0027	0.0005	0.0048	0.0100	0.0163			
34°	0.0305	0.0224	0.0153	0.0092	0.0042	0.0001	-0.0029	-0.0050	-0.0060	-0.0059	-0.0049	-0.0029	0.0002	0.0043	0.0094	0.0155				
33°	0.0238	0.0165	0.0103	0.0050	0.0008	-0.0024	-0.0045	-0.0057	-0.0059	-0.0050	-0.0030	-0.0002	0.0037	0.0087	0.0146					
32°	0.0175	0.0111	0.0057	0.0014	-0.0020	-0.0043	-0.0056	-0.0059	-0.0052	-0.0035	-0.0008	0.0030	0.0078	0.0136						
31°	0.0119	0.0064	0.0019	-0.0016	-0.0041	-0.0056	-0.0061	-0.0055	-0.0040	-0.0014										
30°	0.0069	0.0022	-0.0014	-0.0041	-0.0057	-0.0063	-0.0059	-0.0045												
29°	0.0025	-0.0013	-0.0041	-0.0059	-0.0067	-0.0064	-0.0052													
28°	-0.0013	-0.0042	-0.0062	-0.0071	-0.0070															
27°	-0.0045	-0.0066	-0.0077	-0.0078	-0.0068															

TABLE VIII-9. TABULAR REPRESENTATION OF THE ANNUAL ACCELERATION $\frac{1}{2} \frac{d^2H}{dt^2}$ (1955.0) (in gammas per square year)

$\begin{matrix} \lambda \\ \varphi \end{matrix}$	128°	129°	130°	131°	132°	133°	134°	135°	136°	137°	138°	139°	140°	141°	142°	143°	144°	145°	146°	147°
46°													0.551	0.458	0.490	0.547	0.630	0.738	0.872	1.032
45°												0.361	0.360	0.384	0.434	0.510	0.610	0.737	0.888	1.066
44°											0.284	0.275	0.292	0.334	0.402	0.495	0.614	0.758	0.928	1.123
43°											0.201	0.211	0.245	0.306	0.391	0.502	0.639	0.801	0.988	1.202
42°											0.141	0.168	0.221	0.299	0.403	0.532	0.686	0.867	1.072	1.303
41°										0.082	0.102	0.147	0.217	0.314	0.435	0.582	0.755	0.953	1.176	
40°										0.046	0.085	0.148	0.236	0.350	0.490	0.655	0.845	1.061	1.302	
39°								-0.001	0.004	0.033	0.089	0.171	0.277	0.409	0.566	0.749	0.953	1.191	1.451	
38°					0.058	0.004	-0.025	-0.028	-0.005	0.042	0.116	0.215	0.339	0.489	0.665	0.866	1.092	1.344	1.621	
37°				0.060	-0.001	-0.037	-0.048	-0.033	0.008	0.073	0.165	0.282	0.424	0.592	0.785	1.004	1.248			
36°			0.075	0.005	-0.038	-0.056	-0.049	-0.016	0.043	0.126	0.236	0.360	0.531	0.717	0.927	1.164	1.426			
35°	0.202	0.101	0.025	-0.027	-0.053	-0.053	-0.028	0.023	0.100	0.201	0.329	0.481	0.659	0.863	1.092	1.347	1.627			
34°	0.136	0.052	-0.006	-0.040	-0.047	-0.030	0.013	0.082	0.177	0.296	0.441	0.612	0.808	1.030	1.276	1.549				
33°	0.093	0.028	-0.013	-0.029	-0.018	0.018	0.078	0.165	0.278	0.414	0.578	0.767	0.981	1.220	1.485					
32°	0.073	0.025	0.003	0.004	0.033	0.087	0.165	0.270	0.401	0.555	0.737	0.944	1.175	1.433						
31°	0.073	0.044	0.039	0.059	0.105	0.177	0.273	0.396	0.545	0.717										
30°	0.096	0.084	0.098	0.135	0.200	0.289	0.404	0.544												
29°	0.140	0.146	0.178	0.233	0.316	0.423	0.529													
28°	0.206	0.230	0.279	0.353	0.453															
27°	0.294	0.336	0.404	0.495	0.613															

TABLE IX. DIFFERENCE BETWEEN REDUCED AND CALCULATED VALUES

No.	Station	Magnetic Elements Calculated from Distribution Formulae						Differences of [reduced (Table VII)-calculated]					
		δc	θc	Hc	Xc	Yc	Zc	$\Delta \delta$	$\Delta \theta$	ΔH	ΔX	ΔY	ΔZ
1	Wakkanai (稚内)	9 08.4	59 18.5	26055	25738	4279	43935	31.3	- 4.3	121	67	114	40
2	Kabuka (香深)	09.8	19.8	129	821	4339	44015	-11.2	4.6	- 85	- 96	-275	35
3	Esasi (枝幸)	8 54.9	58 35.7	283	954	4123	43180	-10.9	14.1	- 64	- 39	-142	164
4	Yagisiri (焼尻)	55.7	20.1	559	26240	4217	078	-34.9	41.0	-413	-371	-422	468
5	Monbetu (紋別)	37.9	57 51.4	533	206	3969	42389	11.9	- 0.5	45	57	111	-105
6	Rausu (羅臼)	8 07.2	57 15.1	26576	26274	3671	41511	-54.3	- 3.8	22	113	-330	-257
7	Rumoi (留萌)	46.2	45.5	800	479	4143	42526	- 7.6	- 2.0	128	143	- 96	111
8	Memambetu (女満別)	19.4	17.0	690	375	3809	41712	- 7.9	13.9	-111	- 67	- 22	33
9	Asahigawa (旭川)	37.4	26.9	848	526	4039	42143	13.5	5.9	- 63	- 60	81	- 23
10	Sibetu (標津)	00.4	56 54.8	736	442	3644	41188	1.2	20.0	-125	- 93	79	178
11	Nemuro (根室)	7 45.4	56 32.7	27011	26566	3540	40735	- 5.7	56.2	-625	-416	- 22	653
12	Kotoni (琴似)	8 34.2	56.1	224	910	4094	41800	19.3	-13.8	15	2	116	-325
13	Iwanai (岩内)	38.1	58.6	300	990	4170	955	20.8	- 3.6	-139	-162	70	-264
14	Siranuka (白糠)	01.8	21.9	113	819	3733	40850	-16.9	- 9.3	- 32	15	- 82	96
15	Ikeda (池田)	09.4	24.9	169	867	3814	41005	- 9.5	4.3	- 91	- 52	-106	-115
16	Tomikawa (富川)	8 17.3	56 12.0	27442	27135	3949	41029	15.8	10.1	- 31	- 29	-127	179
17	Setana (瀬棚)	33.0	32.3	578	274	4178	641	-33.4	-23.4	226	260	-312	-189
18	Muroran (室蘭)	23.5	11.1	587	279	4051	174	39.4	0.4	302	263	-333	473
19	Hiroo (広尾)	7 57.5	55 46.2	463	175	3764	40412	1.6	- 5.6	62	83	60	- 97
20	Mori (森)	8 22.3	56 00.8	709	404	4066	41072	-14.7	3.5	- 50	- 23	-157	45
21	Esan (恵山)	8 11.7	55 34.7	27819	27518	3970	40586	-54.6	- 2.0	142	217	-424	166
22	Ōma (大間)	08.7	19.7	945	647	3965	403	-26.6	4.9	-373	-384	152	-420
23	Matumae (松前)	13.2	21.8	28041	743	4036	544	- 5.2	-32.7	389	401	- 14	-215
24	Tanabu (田名部)	01.0	01.6	036	744	3904	066	29.7	- 0.5	- 17	- 34	243	- 23
25	Nohezi (野辺地)	7 52.9	54 35.0	223	939	3861	39666	12.3	- 7.3	- 11	- 8	108	-170
26	Azigasawa (鯨ヶ沢)	7 59.6	54 37.7	28325	28035	3947	39857	- 9.2	2.3	- 19	6	- 86	72
27	Ōdate (大館)	46.2	01.6	517	240	3851	250	5.9	- 3.3	- 76	- 67	42	-145
28	Kuzi (久慈)	30.6	53 47.5	444	188	3706	38805	-11.1	6.6	155	178	- 60	416
29	Akita (秋田)	38.3	28.3	782	512	3823	818	-13.5	- 5.4	53	82	-103	- 18
30	Morioka (盛岡)	26.8	20.2	696	443	3726	494	- 6.4	-23.8	105	122	- 46	-357

31	Miyako	(宮古)	7 14.5	53 09.9	28653	28420	3612	38174	13.4	8.8	- 39	- 49	106	231
32	Sakata	(酒田)	22.4	52 36.4	29136	883	3738	055	2.1	- 5.4	77	86	29	39
33	Onagawa	(女川)	6 51.9	51 56.9	151	949	3511	37119	1.1	-13.4	- 25	- 33	- 20	-206
34	Sendai	(仙台)	54.6	46.2	292	29082	3545	075	35.8	3.2	-126	-166	265	19
35	Murakami	(村上)	7 09.8	52.3	443	204	3674	442	6.3	-13.9	107	109	65	-106
36	Ryōtu	(両津)	7 15.9	51 50.6	29594	29343	3743	37605	6.0	- 7.2	52	58	57	- 35
37	Aikawa	(相川)	16.2	48.6	630	378	3750	608	8.2	0.8	-178	-172	47	-150
38	Niigata	(新潟)	06.9	34.7	604	366	3670	254	12.8	2.0	- 92	- 45	- 6	- 4
39	Wazima-1	(輪島-1)	10.0	14.0	30008	759	3746	311	- 0.7	- 1.9	28	43	- 5	49
40	Wazima-2	(輪島-2)	09.9	13.8	009	761	3746	307	-19.3	-12.5	118	151	-156	- 74
41	Tōkamati	(十日町)	6 50.1	50 41.9	29935	29716	3574	36495	- 1.6	5.8	16	24	- 23	222
42	Itoigawa	(糸魚川)	55.6	41.1	30063	831	3628	651	- 0.5	2.0	-144	-130	- 24	- 73
43	Kuroiso	(黒磯)	31.4	24.5	29851	669	3437	35959	31.4	- 6.7	68	24	233	- 74
44	Ueda	(植田)	19.2	17.7	781	626	3353	680	10.9	- 4.5	- 40	- 76	15	42
45	Toyama	(富山)	52.8	21.5	30277	30045	3626	36496	2.2	5.8	-175	-162	- 1	- 38
46	Matuida	(松井田)	6 28.9	49 45.3	30234	30044	3447	35617	13.6	-13.2	8	- 9	86	-164
47	Mito	(水戸)	09.0	42.2	015	29874	3305	201	4.1	-11.6	35	- 1	- 50	- 5
48	Sioya	(塩屋)	48.4	59.5	509	30278	3612	36309	- 1.3	6.2	-120	-102	- 22	29
49	Saigō-1	(西郷-1)	51.3	50 22.5	775	549	3710	37075	- 2.6	2.7	-191	-181	- 83	- 79
50	Saigō-2	(西郷-2)	51.0	20.8	781	555	3707	047	-14.0	96.4	215	235	-135	2560
51	Takayama	(高山)	6 38.0	49 20.2	30471	30256	3526	35838	- 8.0	11.0	49	68	- 71	- 78
52	Hisiura	(菱浦)	48.5	50 15.8	843	620	3695	37007	-18.9	- 8.0	-204	-178	-230	-324
53	Takehu	(武生)	38.8	49 28.3	698	475	3550	35873	3.8	- 9.6	115	127	50	- 35
54	Nirasaki	(韭崎)	16.4	04.5	490	315	3376	057	9.0	- 3.1	-112	-128	23	- 82
55	Iioka	(飯岡)	5 45.8	48 58.3	190	094	3175	34432	9.0	-37.5	258	192	- 38	-202
56	Miyazu	(宮津)	6 35.1	49 11.3	30911	30688	3538	35773	- 4.7	- 5.7	- 8	16	- 36	-106
57	Iida	(飯田)	17.2	48 52.7	638	455	3388	006	4.1	- 9.8	- 62	- 67	- 4	-184
58	Obama-1	(小浜-1)	32.1	49 04.7	869	650	3508	582	5.1	- 4.6	39	52	55	- 39
59	Obama-2	(小浜-2)	32.1	04.6	869	651	3508	581	4.9	- 5.2	37	49	53	- 40
60	Tottori	(鳥取)	36.1	15.2	31017	792	3562	977	5.6	9.3	17	30	56	242
61	Yonago	(米子)	6 35.3	49 20.2	31115	30893	3578	36184	- 2.8	16.2	-167	-147	- 52	188
62	Hozumi	(穂積)	23.3	48 49.1	30817	615	3438	35176	- 1.1	- 6.9	18	30	- 17	- 73
63	Imaiti	(出雲今市)	33.1	49 21.0	31187	970	3577	36273	- 7.3	25.2	-314	-291	-120	221
64	Kamogawa	(鴨川)	5 48.2	48 17.9	30474	386	3135	33940	17.9	-33.4	89	4	114	-303
65	Sasayama	(篠山)	6 24.0	35.9	31090	877	3458	35247	4.5	1.3	43	- 28	43	- 6

TABLE IX. DIFFERENCE BETWEEN REDUCED AND CALCULATED VALUES-CONTINUED

No.	Station		Magnetic Elements Calculated from Distribution Formulae						Differences of [reduced (Table VII)-calculated]					
			δc	θc	Hc	Xc	Yc	Zc	$\Delta \delta$	$\Delta \theta$	ΔH	ΔX	ΔY	ΔZ
66	Hamada	(浜田)	6 22.2	48 51.7	31432	31223	3515	35942	14.2	21.8	96	96	112	- 616
67	Himezi	(姫路)	21.2	25.1	224	011	3446	184	- 2.0	0.6	24	47	- 6	47
68	Miyosi	(三次)	21.7	36.2	411	197	3480	620	14.1	10.0	- 118	- 111	115	88
69	Takahasi	(高梁)	21.3	27.3	356	140	3462	383	- 0.9	0.0	30	54	4	36
70	Senzu	(泉州)	5 37.3	47 56.5	30677	30578	3142	33771	- 20.7	22.4	- 81	- 112	- 328	587
71	Iga Ueno	(伊賀上野)	6 11.5	48 07.4	31107	30914	3365	34658	3.4	- 2.6	- 34	- 26	17	- 51
72	Motomura	(元村)	5 37.3	47 54.5	30695	595	3142	33755	15.3	3.9	1074	1007	111	1495
73	Utumi	(内海)	54.4	57.1	889	741	3248	34119	17.1	5.0	87	54	93	326
74	Mabusi	(間伏)	35.3	50.7	709	613	3131	33688	22.7	- 71.9	938	903	- 257	- 168
75	Habu	(波浮)	34.4	50.4	702	609	3126	670	147.7	23.3	556	342	1243	1325
76	Simoda	(下田)	5 40.7	47 49.7	30780	30669	3163	33781	2.9	- 30.4	100	57	- 82	- 291
77	Hukue	(福江)	6 00.1	52.1	31042	875	3286	34233	7.0	- 3.6	- 7	- 17	22	4
78	Omaezaki	(御前崎)	5 48.5	47.2	30907	772	3212	33922	3.9	- 16.1	68	40	- 42	- 97
79	Miyagawa	(宮川)	6 00.5	45.1	31137	964	3290	34214	2.4	- 1.3	24	- 24	- 12	15
80	Hukuyama	(福山)	14.2	48 04.3	505	31294	3410	35084	- 2.4	0.2	22	49	- 7	23
81	Senzaki	(仙崎)	6 08.5	48 20.1	31718	31521	3416	35610	- 6.2	- 4.5	202	222	- 58	166
82	Sumoto	(洲本)	07.2	47 42.4	402	204	3343	34511	1.2	1.4	- 21	- 3	13	13
83	Hirosima	(広島)	10.2	48 00.0	656	449	3396	35162	- 6.1	- 0.2	45	75	- 47	41
84	Nagasima	(長島)	5 55.1	47 24.8	283	114	3257	33975	3.6	- 1.0	- 49	- 50	- 4	- 12
85	Izuhara-1	(厳原-1)	53.0	48 29.7	920	760	3360	35957	23.9	- 6.4	62	33	139	50
86	Izuhara-2	(厳原-2)	5 53.1	48 29.6	31920	31760	3360	35956	20.4	- 2.8	18	- 10	103	- 76
87	Yamaguti	(山口)	6 05.6	00.9	781	582	3381	307	- 1.8	- 1.4	71	- 92	- 17	58
88	Miyake Izu	(三宅伊豆)	5 15.8	47 11.0	30869	30810	3022	33028	- 18.8	82.8	- 1294	- 1345	- 479	475
89	Ako	(阿古)	14.9	08.1	886	828	3017	32989	- 56.0	73.3	- 1125	- 1151	- 778	481
90	Tubota	(坪田)	13.2	06.6	882	829	3007	947	- 39.3	43.3	- 286	- 414	314	833
91	Imabari	(今治)	6 05.2	47 35.8	31700	31444	3346	34730	- 2.0	3.4	- 1	78	- 3	50
92	Kawanoe	(川之江)	03.4	27.1	666	464	3325	516	0.3	3.9	- 19	6	17	41
93	Totugawa	(十津川)	5 51.9	07.3	445	273	3236	33821	1.7	1.9	- 43	- 37	- 12	35
94	Katumoto	(勝本)	49.6	54.7	32052	880	3305	35434	9.4	10.2	- 112	- 114	24	141
95	Minabe	(南部)	50.6	46 57.2	31565	389	3227	33767	4.4	1.3	- 28	- 20	24	23

96	Hukuoka	(福岡)	5 49.8	47 31.2	32090	31907	3279	35038	- 11.1	5.8	- 144	- 116	- 137	- 32
97	Nakatsu	(中津)	52.3	16.5	047	854	3275	34719	4.5	7.4	10	31	46	141
98	Ōzato	(大里)	50.9	46 49.5	31736	551	3230	33829	2.3	6.4	- 20	- 2	23	101
99	Karatsu-1	(唐津-1)	43.6	47 17.5	32206	32028	3235	34887	6.5	- 2.4	- 2	9	39	- 47
100	Karatsu-2	(唐津-2)	43.5	17.6	206	028	3235	890	5.1	0.2	- 49	- 36	20	- 46
101	Susaki	(須崎)	5 49.3	46 42.0	31925	31733	3222	33908	0.1	8.1	- 67	- 39	10	59
102	Misaki	(三崎)	49.3	49.5	32052	857	3233	34203	- 0.8	5.6	- 54	- 23	5	13
103	Ōita	(大分)	45.1	41.9	163	971	3206	173	- 10.3	-40.8	556	- 593	- 25	- 270
104	Uwazima	(宇和島)	45.4	32.4	075	884	3198	33890	- 2.3	8.1	- 39	- 7	- 6	76
105	Yanagawa	(柳河)	39.8	48.3	294	32110	3187	34427	1.4	0.0	24	49	15	- 6
106	Haiki	(早岐)	5 36.1	46 52.4	32354	32178	3173	34560	3.6	- 4.1	55	73	24	- 42
107	Mitune	(三根)	4 38.3	01.9	31114	31133	2818	31839	168.4	-42.2	- 601	- 877	1136	- 974
108	Ōgagō	(大賀郷)	38.1	00.8	121	140	2817	827	111.3	-95.1	710	487	781	- 625
109	Nakanogō	(中之郷)	36.4	45 58.3	126	149	2808	778	- 31.3	30.1	- 252	- 353	- 609	- 726
110	Nakamura	(中村)	5 38.9	46 09.4	32129	945	3137	33494	- 1.4	8.9	- 44	- 14	8	87
111	Saeki	(佐伯)	5 39.2	46 17.0	32241	32052	3154	33772	- 9.7	13.3	- 143	- 101	- 82	58
112	Miyazi	(宮地)	37.5	22.8	322	135	3151	971	- 22.9	18.1	- 172	- 120	- 213	124
113	Kumamoto	(熊本)	33.5	15.9	409	226	3124	930	10.3	1.6	- 175	- 153	94	- 209
114	Simabara	(島原)	31.5	17.4	452	271	3115	34000	4.7	2.6	- 116	- 90	42	- 123
115	Hukue	(福江)	20.8	09.5	611	450	3067	327	11.4	-18.6	73	82	86	- 661
116	Tomie-1	(富江-1)	5 18.6	46 21.0	32652	32493	3049	34250	- 15.8	-15.8	5	37	- 176	- 330
117	Tomie-2	(富江-2)	18.5	20.5	654	495	3048	244	5.1	-19.6	475	487	66	80
118	Tomitaka	(富高)	25.8	45 34.4	481	301	3050	33207	- 2.6	6.4	- 5	32	- 1	49
119	Hitoyosi	(人吉)	19.9	26.0	643	466	3009	222	6.7	18.1	- 93	- 63	79	178
120	Usibuka	(牛深)	17.0	31.0	721	548	2996	396	- 4.0	- 0.2	24	61	- 19	- 59
121	Miyazaki	(宮崎)	5 13.6	44 56.0	32686	32515	2954	32683	1.9	8.6	31	64	45	122
122	Nakakosiki	(中甑)	08.0	45 01.8	881	710	2921	33010	- 19.3	11.1	74	129	- 157	193
123	Kagosima	(鹿児島)	04.8	44 37.1	899	730	2887	32561	- 18.8	- 4.7	- 15	40	- 154	- 201
124	Sibushi	(志布志)	02.3	21.6	888	724	2865	251	- 1.3	3.5	36	74	14	11
125	Makurazaki	(枕崎)	4 55.9	10.5	33055	892	2815	224	- 14.0	17.2	- 110	- 58	- 116	108
126	Nisino-omote	(西之表)	4 43.1	43 20.7	33167	33019	2714	31496	1.0	5.2	8	43	25	- 89
127	Miyanoura	(宮之浦)	34.1	00.2	392	245	2636	260	6.9	- 1.5	- 28	8	88	- 171
128	Minamitane	(南種子)	34.5	42 54.2	294	154	2646	033	1.3	9.5	- 75	- 42	16	11
129	Anbō	(安房)	31.7	47.2	361	221	2622	30977	6.9	0.2	6	36	79	- 90
130	Nase-1	(名瀬-1)	3 37.7	40 09.0	34169	34072	2181	28923	13.8	-33.4	- 93	- 73	112	2440

TABLE IX. DIFFERENCE BETWEEN REDUCED AND CALCULATED VALUES-CONTINUED

No.	Station	Magnetic Elements Calculated from Distribution Formulae						Differences of [reduced (Table VII)-calculated]						
		δc	θc	Hc	Xc	Yc	Zc	$\Delta \delta$	$\Delta \theta$	ΔH	ΔX	ΔY	ΔZ	
131	Nase-2	(名瀬-2)	$3^{\circ} 37.2'$	$40^{\circ} 07.7'$	34173^r	34077^r	2178^r	28903^r	$17.9'$	$- 5.1'$	103^r	119^r	164^r	2292^r
132	Naon	(名音)	36.3	06.0	209	111	2166	914	21.1	-14.4	91	107	201	2447
133	Koniya	(古仁屋)	30.9	$39 49.9$	269	177	2124	685	23.4	$- 5.1$	103	115	217	2731

Table X

Complete List

of

Magnetic Observations

REMARKS ON THE COMPLETE LIST OF MAGNETIC OBSERVATION

Table X is the summary of results of geomagnetic observation at each station in the present survey. The name and location of magnetic station, number and assortment of instrument used, and data of observation are shown at the top column in each table.

The direct observed values for the geomagnetic three elements are represented tabularly. The exchange of assortment of magnetometer, coil and standard cell or resistance, etc. are pointed by an asterisk.

The names of the chief and member of the observation party for each station are as shown in Table II.

No. 1. Wakkanai (稚 内)

Lat.=45° 25' 43" N., Long.=141° 40' 12" E.

Height=5 m

July 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 2

Declination

Date	Time	δ
28	h m 14 00.1	° ' 9 42.4
	01.9	42.4
	58.8	40.8
	15 00.2	40.8
	58.7	40.0
	16 00.5	40.0
	58.4	38.6
	17 00.1	38.6
	59.8	38.6
	18 01.6	38.5
	59.2	38.5
	19 00.5	38.5
	59.3	38.0
	20 02.7	37.9
	58.1	38.1
	21 00.0	38.1
	58.3	36.7
	22 00.3	36.7
	57.4	38.1
	23 00.2	38.2
	56.9	37.6
	58.5	37.6
29	1 00.4	36.4
	02.2	36.4
	56.6	37.4
	58.2	37.5
	2 59.8	36.8
	3 01.8	36.8
	4 08.3	36.6
	10.6	36.6
	5 03.8	34.6
	05.7	34.6
	6 54.4	34.5
	56.3	34.5
	56.9	35.1
	58.5	35.1
	7 55.6	35.8
	57.6	35.2
	8 00.3	36.0
	02.1	36.0
	9 01.7	37.0
	03.8	37.2
	59.8	38.6
	10 01.6	38.8
	59.3	42.5
	11 01.4	42.5
	56.7	43.4
	59.4	43.4
	13 01.3	42.5
	02.9	42.5
	56.2	41.1
	57.8	41.1

Horizontal Intensity

Date	Time	H
28	h m 14 14.6	γ 26177
	19.1	77
	15 08.8	85
	12.4	85
	16 08.7	95
	12.0	95
	17 09.8	202
	13.5	02
	18 08.2	01
	11.6	07
	16.1	07
	19 08.5	185
	13.6	86
	20 35.1	93
	37.5	91
	21 07.4	73
	10.9	71
	22 08.5	85
	11.9	86
	23 11.4	95
	16.1	96
29	0 06.1	94
	09.8	94
	1 12.1	94
	15.6	94
	2 19.5	220
	24.0	18
	3 11.9	191
	16.2	90
	4 24.8	92
	28.2	91
	5 14.1	88
	17.4	88
	6 03.1	85
	06.2	86
	7 05.4	78
	09.4	76
	8 11.9	75
	19.3	70
	23.2	70
	9 11.4	71
	14.7	71
	10 07.9	70
	10.9	69
	11 08.3	70
	11.5	69
	12 07.2	85
	10.7	87
	14.0	87
	13 09.1	200
	12.4	199
	14 04.2	201
	07.5	00

Dip

Date	Time	θ
28	h m 17 36.8	° ' 59 13.6
	41.1	13.6
	23 31.3	15.0
29	34.3	14.9
	5 34.1	15.0
	41.0	15.0

No. 2. Kabuka (香 深)

Lat.=45° 18' 09" N., Long.=141° 02' 59" E.

Height=50 m

Aug. 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 2

Declination			Horizontal Intensity			Dip		
Date	Time	δ	Date	Time	H	Date	Time	θ
3	h m	° '	3	h m	r	3	h m	° '
	10 58.8	8 58.4		11 12.7	26040		11 44.4	59 24.7
	11 01.3	58.4		16.3	42		47.3	24.6
	12 06.4	9 0.0		19.8	45	17	34 4	24.1
	08.5	0.1		26.0	44		37.2	24.1
	59.1	0.2		12 16.7	50		53.9	24.0
	13 01.2	0.2		20.7	50	23	57.6	24.0
	57.1	8 59.5		13 09.5	57		30.3	24.8
	14 00.1	59.5		13.2	59		33 5	24.7
	56.8	59.2		18.4	57	4		
	58.3	59.3		14 15.0	56			
	16 00.0	57.9		18.4	56			
	01.8	57.9		15 04.6	58	5		
	17 01.2	57.4		08.1	59			
	03.0	57.4		16 08.9	57			
	18 01.8	57.6		12.0	58	17		
	03.3	57.6		17 10.9	58			
	19 01.0	56.6		14.7	57			
	04.0	57.0		18 13.1	61	19		
	06.4	57.0		15.8	61			
	59.9	57.0		19 18.5	62			
	20 02.5	56.7		22.7	59	20		
	04.4	56.6		26.4	56			
	57.5	57.0		29.9	52			
	59.7	56.9		20 12.9	53	21		
	21 57.9	56.6		16.2	55			
	22 00.6	56.6		21 06.7	58			
	23 26.8	56.4		10.2	58	22		
	29.3	56.4		22 09.4	58			
	4 0 16.4	56.4		13.2	58			
	18.2	56.4	4	23 37.4	62	0		
	58.7	56 3		40.9	62			
	1 01.1	56.3		4 24.8	62			
	2 01.0	56.1		28.8	62	1		
	03.3	56.2		08.3	61			
	56.5	55.9		11.7	61			
	58.3	55.9		2 11.4	61	2		
	3 59.5	55.0		14.9	62			
	4 02.6	55.0		3 07.0	59			
	5 01.4	54.5		10.6	59	4		
	03.8	54.5		14.4	60			
	58.4	54.1		18.4	60			
	6 00 3	53.9		5 17.0	53	5		
	7 27.6	51.5		20.2	53			
	28.8	51.5		6 08.4	55			
	8 02.4	51.7		12.1	55	7		
	04.5	51.7		38.1	54			
	57.9	52.9		41.3	54			
	9 02.0	52.9		8 23.8	53	8		
	59.1	56.3		27.3	52			
	10 01.6	56.3		9 16.6	55			
	58.5	58.6		19.7	53	9		
	11 00.3	58.5		23.9	49			
				27.9	50			
				10 10.1	46	11		
				14.2	46			
				08.4	49			
				11.7	52			
				16.3	53			

No. 3. Esasi (枝 幸)

Lat.=44° 56' 02" N., Long.=142° 35' 01" E.

Height=10 m

July 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 2

Declination			Horizontal Intensity			Dip		
Date	Time		δ	Date	Time		H	θ
22	h m	° '	8 46.5	22	h m	r	26234	° '
	13	23.6	46.4		14	15.4	35	58 49.8
		25.5	45.9			18.7	35	49.8
		59.2	45.8			09.5	35	49.8
	14	01.2	45.6		15	13.3	29	49.7
		59.4	45.6			10.2	29	49.4
	15	02.6	43.9		16	13.6	28	49.5
		00.1	43.8			08.1	29	49.6
	16	02.3	43.3		17	11.9	37	49.6
		57.3	43.3			15.8	40	
		59.2	42.9			20.6	40	
	17	55.6	42.8		18	08.3	35	
		57.9	42.7			11.3	35	
	18	58.7	42.4		19	11.5	38	
		01.1	42.4			15.6	39	
	19	02.3	41.5		20	11.2	39	
		03.7	41.5			10.5	35	
		57.9	42.8			15.2	33	
	20	59.6	42.8		21	12.9	40	
		03.7	42.3			16.4	41	
	21	59.6	41.8		22	11.9	36	
		01.9	41.9			15.5	34	
		02.4	41.4			21.9	39	
	22	02.4	41.4		23	09.3	27	
		04.7	41.2			12.9	20	
	23	03.6	41.1			11.3	17	
		05.3	41.0			14.6	17	
		58.1	39.8			16.6	16	
	1	59.8	39.7			19.9	25	
		59.7	38.8			10.0	25	
	2	01.3	40.6			13.1	33	
		59.4	40.6			09.3	33	
	3	01.6	42.2			12.5	21	
		59.5	43.0			25.6	20	
	4	01.6	43.0			29.6	17	
		59.8	43.1			15.5	17	
	5	02.1	44.1			17.5	16	
		59.5	44.0			10.1	16	
	6	01.4	44.4			13.6	33	
		59.1	44.4			17.3	33	
	7	01.3				12.4	39	
		58.8				16.1	62	
	8	00.7				08.2	61	
		56.5				11.4	59	
	9	58.5				18.8		
		59.0				23.5		
	10	01.1				27.0		
		57.1						
	11	59.7						
		58.9						
	12	01.5						
		58.4						
	13	01.0						
		01.7						
	14	03.8						

No. 4. Yagisiri (焼 尻)

Lat.=44° 26' 25" N., Long.=141° 25' 37" E.

Height=60 m

Aug. 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ	
	^h ^m	[°]	[']
14	16 01.0	8	19.5
	03.1		19.5
	58.3		18.4
	17 00.0		18.5
	18 01.2		18.3
	03.3		18.3
	19 01.5		18.0
	03.3		17.9
	20 00.2		18.1
	02.5		18.0
	58.5		18.7
	21 00.2		18.7
	57.6		18.8
	59.9		18.7
	22 59.0		18.7
	23 01.4		18.7
	59.1		18.5
	15 0 01.4		18.6
	1 00.3		17.8
	02.9		17.8
15	57.6		18.1
	59.8		18.0
	2 56.1		17.8
	58.2		17.9
	3 58.7		17.8
	4 00.6		17.8
	58.8		17.6
	5 00.7		17.6
	57.2		16.7
	59.8		16.6
	6 58.7		16.5
	7 00.8		16.5
	57.7		17.5
	59.8		17.5
	8 58.7		19.4
	9 00.3		19.4
	57.1		20.2
	58.7		20.2
	10 59.1		21.4
	11 00.8		21.4
16	58.6		22.4
	12 00.3		22.4
	58.8		23.2
	13 00.6		23.2
	03.1		21.6
	05.4		21.5
	58.0		20.2
	15 00.9		20.4
	02.7		20.0
	04.3		20.0
16	57.5		20.0
	00.1		19.9

Date	Time	H
	^h ^m	^r
14	16 12.8	26156
	19.3	55
	17 10.1	61
	13.9	61
	18 38.0	79
	41.1	79
	19 11.2	62
	14.3	63
	20 17.1	69
	20.7	69
	21 09.7	82
	14.5	82
	22 09.3	68
	13.8	69
	23 08.8	72
	12.7	73
	16.5	73
	15 0 12.1	76
	15.6	76
	1 11.2	71
15	14.6	71
	2 07.6	73
	11.4	73
	3 05.6	73
	09.2	73
	4 12.1	70
	15.2	70
	5 09.5	72
	13.2	72
	6 08.7	59
	12.4	58
	7 17.9	52
	21.4	49
	25.3	49
	8 07.3	38
	11.3	38
	9 06.6	43
	10.2	43
	10 06.9	49
	10.6	49
16	11 07.7	60
	11.1	60
	12 07.0	62
	10.1	60
	13 08.6	67
	11.8	67
	14 12.7	74
	17.5	71
	23.6	72
	15 11.0	72
16	13.9	73
	17.3	73
	07.3	70
16	10.4	70

Date	Time	θ
	^h ^m	[°] [']
14	17 27.2	59 01.1
	30.2	01.1
	23 28.5	00.7
15	31.4	00.7
	5 32.2	01.1
	35.2	01.0
	11 21.3	01.2
	24.7	01.2

No. 5. Monbetu (紋 別)

Lat.=44° 20' 54" N., Long.=143° 20' 54" E.

Height=6 m

July 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
18	^h ^m	[°] [']
	13 05.7	8 52.1
	07.9	52.1
	59.6	50.3
	14 02.3	50.3
	59.9	49.9
	15 02.1	49.9
	16 05.0	49.8
	07.1	49.8
	59.2	48.8
	17 01.4	48.8
	18 10.5	48.0
	12.5	47.9
	58.8	48.2
	19 01.1	48.2
	20 05.1	48.1
	06.9	48.1
	21 00.6	48.0
	02.6	48.1
	44.6	48.6
	57.0	48.6
	58.8	48.6
	22 58.7	48.5
	23 00.6	48.5
	56.2	48.3
	58.5	48.3
	19 0 57.4	46.9
	59.7	46.9
	1 59.3	46.6
	2 00.9	46.7
	58.9	46.7
	3 01.4	46.6
	4 23.6	45.7
	26.0	45.7
	5 00.0	45.1
	02.3	45.1
	6 15.1	44.6
	16.9	44.5
	57.0	44.4
	58.1	44.3
	8 14.4	44.9
	16.3	44.9
	9 00.4	45.3
	02.7	45.3
	57.2	47.7
	59.1	47.8
	10 59.8	49.2
	11 01.7	49.3
	57.5	50.9
	12 00.0	50.9
	58.7	52.1
	13 01.4	52.1

Date	Time	H
18	^h ^m	^r
	13 26.0	26594
	29.2	94
	14 10.0	602
	13.9	02
	15 11.0	599
	14.8	600
	16 15.3	597
	19.8	97
	17 13.6	94
	16.9	601
	20.6	10
	24.3	09
	18 28.0	00
	32.0	00
	19 12.5	04
	15.3	03
	20 36.1	06
	39.4	05
	21 14.8	599
	18.1	99
	22 06.9	602
	10.0	02
	23 14.4	02
	17.8	02
	19 0 06.4	02
	10.6	02
	1 11.0	02
	14.8	02
	2 11.2	597
	14.7	97
	3 16.2	605
	19.4	05
	4 36.8	598
	41.1	98
	5 09.9	99
	13.4	99
	6 32.9	88
	36.2	88
	7 08.6	82
	11.8	81
	15.2	76
	18.8	76
	8 26.5	61
	29.9	62
	9 20.5	54
	23.6	55
	10 07.6	48
	10.3	50
	11 11.9	62
	15.6	62
	12 08.1	72
	11.1	72
	13 11.3	88
	15.8	87

Date	Time	θ
18	^h ^m	[°] [']
	17 46.1	57 50.6
	49.5	50.6
	23 33.2	50.9
	36.2	50.9
	19 5 32.5	50.3
	36.7	50.9
	54.2	51.3
	57.4	51.4
	11 33.1	51.9
	36.4	52.6

No. 6. Rausu (羅 臼)

Lat.=44° 01' 01" N., Long.=145° 11' 42" E.

Height=15 m

Aug., Sept. 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
31	9 08.6	7 11.5
	10.9	11.4
	58.8	13.4
	10 01.3	13.4
	57.6	15.0
	11 00.1	15.3
	58.1	15.6
	12 01.1	15.7
	13 01.1	14.9
	03.6	14.7
	59.9	14.3
	14 03.0	14.4
	58.9	13.4
	15 01.4	13.3
	16 00.0	12.0
	02.7	11.9
	17 00.0	11.6
	02.2	11.7
	59.4	12.0
	18 01.7	12.1
	19 02.2	12.2
	06.0	12.2
	58.5	11.6
	20 01.9	11.5
	57.7	11.4
	21 00.1	11.4
	57.3	11.5
	22 00.4	11.5
	58.3	11.0
	23 01.2	10.9
	56.2	10.6
	59.4	10.8
1	0 59.4	10.4
	1 02.9	10.4
	2 06.2	10.0
	08.2	10.1
	56.4	10.3
	58.9	10.2
	3 57.1	10.3
	4 00.3	10.2
	59.6	8.2
	5 02.1	8.2
	59.2	6.7
	6 09.7	7.0
	56.7	6.6
	59.3	7.0
	7 59.3	9.2
	8 01.8	9.3
	57.2	10.4
	9 00.0	10.4
	58.2	12.8
	10 00.4	12.9
	57.0	14.2
	59.5	14.2

Date	Time	H
	h m	r
31	9 18.0	26541
	21.4	41
	10 09.1	46
	12.6	47
	11 06.5	64
	09.5	66
	12 07.1	76
	10.1	79
	13 09.7	87
	13.9	87
	14 09.0	86
	12.3	86
	15 14.7	90
	18.5	90
	16 09.1	85
	11.7	85
	17 09.2	78
	12.4	80
	18 07.9	89
	09.9	89
	19 14.5	94
	17.4	94
	20 08.1	94
	11.2	96
	21 07.3	94
	10.5	95
	22 10.3	94
	13.5	95
	23 07.2	99
	11.4	99
1	0 05.5	92
	09.7	92
	1 21.3	96
	25.9	95
	2 13.5	91
	16.3	90
	3 05.2	94
	07.6	94
	4 07.6	96
	10.6	95
	5 08.9	93
	11.7	94
	6 16.3	95
	21.2	96
	7 05.6	89
	08.8	87
	8 07.4	77
	10.9	79
	9 07.1	73
	10.3	75
	10 07.6	75
	11.0	77
	11 04.8	86
	07.6	86

Date	Time	θ
	h m	° '
31	11 23.1	57 12.5
	26.5	12.7
	17 21.0	11.1
1	24.0	11.2
	23 23.8	11.0
	27.6	10.9
	5 20.6	11.3
	23.9	11.3

No. 7. Rumoi (留 萌)

Lat.=43° 56' 03" N., Long.=141° 38' 55" E.

Height=30 m

Aug. 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
17	h m 10 05.7	° ' 8 37.7
	07.4	38.0
	59.3	38.9
	11 01.2	38.9
	12 01.9	40.0
	04.0	40.0
	58.2	40.9
	13 00.3	40.9
	58.0	40.8
	59.3	40.8
	15 00.6	39.1
	03.6	39.0
	16 01.7	38.6
	03.6	38.5
	57.0	37.4
	59.1	37.4
	17 58.4	36.4
	18 00.4	36.4
	58.4	36.7
	19 00.6	36.7
	20 00.0	36.2
	01.9	36.1
	21 00.6	37.1
	02.6	37.1
	59.1	36.8
	22 00.3	36.8
	23 59.2	37.0
	01.1	37.0
18	0 00.5	36.9
	02.4	36.9
	1 10.5	36.8
	13.4	36.8
	59.5	37.0
	2 00.8	37.0
	3 00.4	36.7
	03.0	36.7
	4 01.6	35.7
	03.9	35.7
	5 31.6	33.3
	34.7	33.3
	58.0	33.0
	6 00.1	33.0
	57.7	32.8
	59.3	32.9
	8 00.0	34.4
	04.3	34.4
	57.4	34.9
	59.6	35.0
	10 00.9	37.2
	02.6	37.2

Date	Time	H
17	h m 10 20.8	r 26916
	24.0	17
	11 12.1	30
	15.4	31
	12 23.0	38
	27.4	39
	13 08.2	43
	12.4	43
	14 09.4	50
	12.3	51
	15 13.6	48
	17.4	48
	16 12.1	43
	17.1	41
	20.7	40
	17 06.7	28
	09.7	28
	19 07.8	10
	10.5	10
	19 09.5	25
	12.4	26
	20 09.7	41
	13.1	41
	21 10.6	36
	14.5	36
	22 06.6	46
	10.5	46
	23 09.0	49
	12.9	49
18	0 09.9	49
	13.7	49
	1 31.3	48
	34.7	49
	2 20.4	48
	24.8	48
	3 14.0	48
	17.1	48
	4 16.6	43
	20.2	43
	5 47.3	42
	50.6	43
	6 18.9	36
	22.2	36
	7 07.2	29
	10.5	28
	8 18.6	09
	22.1	10
	9 10.0	07
	13.0	07
	10 10.2	13
	13.5	13

Date	Time	θ
17	h m 11 33.1	° ' 57 43.4
	36.4	43.4
	17 28.9	43.7
	32.9	43.8
	23 23.9	43.7
18	26.9	43.7
	6 33.6	43.7
	36.3	43.7
		43.7

No. 8. Memanbetu(女満別)

Lat.=43° 54' 26" N., Long.=144° 11' 33" E.

Height=30 m

Sept. 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Declination			Horizontal Intensity			Dip		
Date	Time	δ	Date	Time	H	Date	Time	θ
4	^h 9 ^m 16.0	^o 8 ['] 11.6	4	^h 9 ^m 24.9	26548	4	^h 11 ^m 28.6	^o 57 ['] 32.0
	16.5	11.8		30.7	50		29 6	31.9
	56.9	12.7		10 09.0	58		17 22 0	32.1
	10 00.8	13.0		14.3	58		25.4	32.3
	59.9	13.4		11 08.6	64		23 24.5	32.7
	11 01.8	13.3		11.9	66	5	5 28.4	32.6
	57.7	14.6		12 07.3	69		5 23.4	32.5
	12 00.5	14.5		11.3	69		27.0	32.5
	13 05.5	15.4		13 13.3	67			
	07.4	15.5		16.9	67			
	57.5	15.6		14 06.1	60			
	14 00.4	15.4		08.9	60			
	59.1	13.5		15 07.2	55			
	15 01.6	13.4		10.0	55			
	16 00.8	11.9		16 11.4	66			
	04.0	11.8		14.6	67			
	57.3	10.4		17 07.4	70			
	59.7	10.2		10.7	69			
	17 58.0	10.5		18 08.2	71			
	18 00.5	10.4		11.6	78			
	19 06.7	10.1		19 19.0	79			
	09.8	10.2		22.7	77			
	20 02.6	8.4		20 17.4	72			
	06.2	8.5		20.9	71			
	58.8	8.3		21 18.9	64			
	21 00.7	8.3		22.2	62			
5	22 01.0	10.1	5	22 17.4	74			
	03.5	10.0		21.2	70			
	23 01.3	9.8		23 09.4	68			
	04.1	9.9		12.7	70			
	57.5	9.7		0 06.1	77			
	0 01.0	9.7		09.4	78			
	1 00.3	7.8		1 10.4	75			
	03.3	7.7		14.0	75			
	59.7	9.3		2 09.5	74			
	2 02.3	9.1		12.6	74			
	56.1	9.3		3 08.1	69			
	58.6	9.4		11.3	69			
	4 00.2	9.3		4 11.0	71			
	02.3	9.2		14.6	71			
	59.8	8.8		5 09.2	75			
	5 02.2	8.9		12.3	77			
	59.2	8.4		6 08.8	74			
	6 01.4	8.2		11.3	71			
	7 02.4	8.6		7 10.8	67			
	04.8	8.7		13.9	65			
	58.0	8.3		8 05.9	60			
	8 00.8	8.6		08.4	60			
	57.7	10.2		9 06.5	45			
	9 00.3	10.5		09.5	45			
	58.6	13.4		10 09.0	49			
	10 01.9	13.3		12.2	50			

No. 9. Asahigawa (旭 川)

Lat.=43° 46' 20" N., Long.=142° 22' 40" E.

Height=120 m

Sept. 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
7	11 57.8	8 51.9
	12 00.5	51.9
	13 03.0	52.1
	06.0	52.2
	14 03.3	51.6
	06.3	51.4
	58.9	51.1
	15 02.0	51.0
	16 00.4	50.4
	02.3	50.1
	59.3	48.8
	17 03.4	48.7
	18 01.7	48.6
	04.5	48.8
	19 00.1	49.0
	02.5	49.2
	57.6	49.8
	20 00.3	49.7
	58.3	49.6
	21 00.7	49.6
	58.4	49.2
	22 01.4	49.2
8	58.0	49.5
	23 01.0	49.4
	58.0	49.2
	0 00.7	49.2
	1 02.1	48.3
	05.1	48.6
	58.7	49.9
	2 01.2	49.9
	3 00.5	50.1
	02.6	50.1
	56.7	48.9
	59.2	48.9
	4 58.1	48.2
	5 00.2	48.2
	58.4	48.5
	6 01.1	48.7
	7 22.3	49.1
	24.5	49.4
	8 01.3	48.9
	04.2	49.2
	55.8	50.4
	58.5	50.6
	9 58.0	52.7
	10 00.3	52.7
	58.5	53.0
	11 00.6	53.2
	12 00.5	53.6
	02.8	53.8
	13 03.3	53.2
	05.3	53.1
	59.7	51.5
	14 02.5	51.5

Date	Time	H
	h m	r
7	12 09.3	26761
	12.9	59
	13 12.0	66
	15.8	65
	14 14.2	76
	16.8	77
	15 07.4	74
	10.9	74
	16 08.8	67
	12.5	67
	17 10.2	69
	14.5	69
	18 11.3	78
	14.1	78
	19 09.4	88
	13.1	90
	20 06.0	80
	08.8	82
	21 06.4	84
	09.4	85
	22 28.2	90
	32.6	91
	23 13.1	801
8	16.3	00
	0 07.2	790
	09.7	91
	1 15.7	89
	19.7	94
	2 08.3	800
	12.0	798
	3 08.4	97
	11.0	97
	4 05.3	82
	07.6	82
	5 05.9	92
	08.2	92
	6 07.7	74
	10.8	73
	7 29.8	68
	33.0	66
	8 13.2	64
	16.0	64
	9 05.6	53
	08.2	53
	10 05.7	58
	09.1	60
	11 15.7	63
	18.3	63
	12 09.9	78
	12.4	79
	13 12.9	92
	15.7	95
	14 08.9	96
	11.2	800

Date	Time	θ
	h m	° '
7	17 24.5	57 33.2
	27.8	33.1
	23 35.3	31.9
8	39.9	31.6
	5 16.5	32.9
	20.7	32.8
	11 25.7	34.0
	28.0	33.7

No. 10. Sibetu (標 津)

Lat.=43° 39' 16" N., Long.=145° 08' 25" E.

Height=2 m

Aug. 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
27	^h ^m	[°] [']
	11 57.6	8 4.8
	59.5	4.6
	12 57.8	3.0
	13 00.3	2.9
	55.4	2.6
	57.4	2.7
	14 56.1	2.9
	58.2	2.8
	15 56.8	1.6
	59.5	1.7
	16 56.1	1.6
	58.6	1.7
	17 58.1	1.7
	18 01.2	1.7
	19 07.8	1.4
	10.3	1.5
	20 02.6	0.9
	05.9	0.7
	57.9	1.2
	21 01.3	1.2
	58.3	1.1
	22 01.3	1.0
	55.8	1.1
	58.7	0.9
	23 56.9	0.9
	59.4	0.8
28	1 00.3	0.3
	02.9	0.1
	58.4	0.1
	2 01.3	0.1
	59.5	0.5
	3 02.6	0.7
	4 05.3	0.1
	07.6	0.0
	59.7	7 58.3
	5 01.8	58.2
	54.7	56.8
	57.5	56.7
	6 54.5	57.1
	56.5	57.3
	7 57.7	58.6
	8 00.2	58.5
	9 02.4	8 1.9
	05.1	2.1
	59.0	4.5
	10 01.5	4.4
	56.1	5.9
	58.5	5.8
	11 57.2	5.7
	12 00.1	5.5
	13 01.1	5.3
	06.6	5.2
	59.5	4.1
	14 01.9	4.1
	15 05.1	1.9
	06.8	1.9

Date	Time	H
27	^h ^m	^r
	12 04.6	26616
	07.0	17
	13 08.8	23
	11.4	23
	14 03.0	15
	05.5	13
	15 06.1	599
	09.3	603
	16 07.7	04
	10.5	01
	17 04.2	08
	07.0	07
	18 07.4	10
	10.5	10
	19 17.4	03
	21.0	04
	20 12.0	10
	15.5	10
	21 06.8	05
	09.6	05
	22 11.3	08
	14.9	07
	23 04.3	05
	07.6	06
28	0 05.1	11
	07.5	10
	1 10.8	12
	14.1	12
	2 08.8	13
	12.1	12
	3 09.2	16
	12.6	13
	4 13.3	16
	16.2	18
	5 06.7	07
	09.9	05
	6 03.5	596
	06.4	94
	7 01.9	91
	05.5	89
	8 06.0	85
	08.3	85
	9 09.8	79
	12.4	79
	10 07.2	82
	10.6	86
	11 05.4	93
	08.3	93
	12 06.0	95
	08.9	97
	13 13.7	99
	17.6	600
	14 07.2	596
	09.5	94
	15 12.5	605
	15.1	10

Date	Time	θ
27	^h ^m	[°] [']
	17 18.8	57 14.5
	22.9	14.7
28	23 16.3	15.2
	20.1	15.0
	5 20.3	14.6
	23.6	14.9
	11 18.1	15.5
	22.3	15.5

No. 11. Nemuro (根 室)

Lat.=43° 19' 18" N., Long.=145° 36' 04" E.

Height=50 m

Aug. 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
24	^h 9 ^m 15.4	[°] 7 ['] 38.9
		38.7
	10 01.5	41.4
		41.6
	11 02.4	43.1
		43.0
		43.2
		43.2
	13 02.5	42.8
		42.7
	14 00.8	42.5
		42.3
		40.6
	15 02.9	40.4
		38.1
	16 00.8	38.1
		38.9
	17 01.6	38.9
		39.2
	18 01.9	39.2
	19 03.9	38.1
		37.9
		38.2
	20 00.7	38.3
	21 01.8	36.7
		36.8
		37.4
	22 01.8	37.5
	23 02.1	36.4
25		36.5
	0 05.4	37.2
		37.2
		36.8
	1 01.3	36.9
		37.1
	2 01.5	37.3
		37.1
	3 00.7	37.0
	4 00.6	37.0
		36.9
	5 03.6	36.8
		36.7
		35.4
		35.3
	6 58.7	35.2
	7 02.0	35.2
	8 02.5	36.8
		36.9
	9 01.5	40.3
		40.7
		42.4
	10 01.6	42.3
		41.5
	11 01.6	41.4

Date	Time	H
24	^h 9 ^m 34.2	^r 26385
		79
	10 23.6	77
		77
	11 10.7	77
		76
	12 06.3	71
		72
	13 14.4	80
		82
	14 08.8	99
		98
	15 08.2	85
		86
	16 07.8	75
		78
	17 08.3	74
		73
	18 08.1	87
		86
	19 13.7	90
		89
	20 06.0	88
		85
	21 11.8	88
		87
	22 08.9	96
		96
	23 12.4	412
25		06
		03
	0 15.9	383
		81
	1 10.0	80
		80
	2 08.2	81
		80
	3 06.9	80
		81
	4 14.8	84
		84
	5 12.2	80
		81
	6 04.5	80
		79
	7 08.0	75
		74
	8 12.0	72
		71
	9 11.4	60
		60
	10 07.9	65
		69
	11 11.3	92
		92

Date	Time	θ
24	^h 11 ^m 24.9	[°] 57 ['] 30.2
		30.2
	17 29.1	30.9
		31.0
	23 34.2	29.6
25		29.3
	5 27.8	30.8
		30.9

No. 12. Kotoni (琴 似)

Lat.=43° 04' 18" N., Long.=141° 18' 11" E.

Height=5 m

July 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
12	^h 18 ^m 15.3	^o 8 ['] 50.9
		50.9
	19 00.7	50.9
		50.9
	02.6	50.9
	51.7	50.9
	53.6	50.9
	21 00.7	51.0
	02.7	51.0
	59.5	50.8
	22 01.8	50.9
	23 03.3	50.6
13	05.8	50.6
	57.5	50.8
	59.2	50.8
	0 59.5	48.9
	1 02.5	48.9
	59.5	48.9
	2 01.5	48.9
	58.9	48.9
	3 01.0	48.9
	4 03.1	48.9
	06.0	48.9
	5 04.5	48.6
	06.4	48.6
	6 18.0	48.3
	20.1	48.2
	7 02.3	48.7
	04.3	48.7
	58.7	49.7
	8 01.1	50.1
	59.1	52.5
	9 00.9	52.5
	10 00.9	52.9
	03.9	52.9
	57.9	54.1
	11 00.2	54.3
	58.7	54.4
	12 00.5	54.4
	57.2	54.8
	58.9	54.9
	14 00.0	54.4
	01.4	54.4
	58.2	53.4
	15 00.2	53.3
	57.8	52.0
	59.5	52.0
	17 02.3	51.0
	03.8	51.0
	18 01.0	50.1
	03.5	50.1

Date	Time	H
12	^h 18 ^m 31.6	^r 27278
		78
	35.5	78
	19 25.8	82
		82
	28.9	82
	20 29.9	82
		82
	33.0	82
	21 12.5	85
		84
	13.2	84
13	22 09.6	82
		82
	12.2	82
	23 14.2	87
		87
	17.6	87
	0 15.0	82
		82
	18.7	82
	1 11.0	71
		71
	14.9	71
	2 10.5	69
		70
	14.3	70
	3 12.0	70
		70
	16.1	70
	4 21.0	69
		70
	24.3	70
	5 22.2	65
		65
	27.8	65
	6 34.3	57
		57
	37.3	57
	7 20.4	45
		44
	24.0	44
	8 10.4	33
		33
	13.4	33
	9 09.4	43
		43
	12.8	43
	10 12.6	36
		36
	15.7	36
	11 07.5	40
		41
	10.7	41
	12 09.3	74
		75
	13.7	75
	17.1	75
	13 04.1	52
		52
	07.0	52
	14 08.1	52
		51
	11.4	51
	15 09.3	55
		54
	11.9	54
	16 06.4	61
		61
	09.4	61
	17 11.8	57
		57
	14.9	57
	18 10.9	58
		58
	13.8	58

Date	Time	θ
12	^h 23 ^m 30.9	^o 56 ['] 41.0
		41.1
13	35.4	41.1
	5 49.2	43.1
		42.2
	53.4	42.2
	57.1	42.1
	11 27.2	43.5
		43.3
	31.4	43.3
	17 32.0	43.8
		43.8
	35.4	43.8

No. 13. Iwanai (岩 内)

Lat.=42° 58' 54" N., Long.=140° 31' 11" E.

Height=5 m

July 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 2

Declination Horizontal Intensity Dip

Date	Time	δ
	h m	° '
8	13 09.5	9 0.1
	12.9	0.1
	14 00.0	0.1
	02.4	0.1
	15 00.2	8 58.7
	02.8	58.7
	16 00.0	58.8
	02.2	58.7
	17 00.0	58.1
	02.4	58.1
	18 02.1	57.0
	04.8	56.9
	19 00.1	56.5
	02.3	56.5
	20 00.0	56.5
	01.3	56.5
	21 12.5	56.3
	14.2	56.3
	22 00.5	56.4
	02.4	56.4
	59.5	56.4
	23 01.3	56.4
	59.4	56.6
9	0 02.2	56.5
	1 01.1	56.5
	03.1	56.5
	59.9	55.1
	2 02.6	55.1
	3 02.0	55.7
	04.4	55.7
	59.6	55.5
	4 02.3	55.5
	59.4	54.8
	5 02.3	54.8
	58.7	53.7
	6 00.6	53.6
	7 00.2	52.5
	01.7	52.5
	8 01.2	53.2
	03.6	53.2
	58.9	55.3
	9 00.9	55.3
	10 01.3	57.7
	03.7	57.9
	58.5	59.8
	11 00.4	59.9
	59.4	9 1.0
	12 02.6	1.1
	59.9	1.7
	13 02.0	1.6

Date	Time	H
	h m	r
8	13 28.0	27203
	31.7	04
	14 15.0	03
	19.6	03
	15 12.8	04
	16.6	04
	16 11.6	198
	15.2	99
	17 15.1	92
	19.0	93
	18 17.2	93
	20.9	91
	19 18.4	87
	22.5	87
	20 09.3	76
	13.6	76
	21 30.4	76
	34.8	77
	22 12.1	81
	15.3	81
	23 16.1	86
	19.4	88
	9 0 24.5	89
	28.0	89
9	1 11.3	83
	14.7	83
	2 14.3	88
	17.5	88
	3 16.4	88
	19.6	88
	4 13.6	86
	17.0	86
	5 12.5	83
	15.8	83
	6 10.9	81
	14.6	84
	18.9	84
	7 10.8	71
	15.3	71
	8 19.3	56
	22.5	56
	9 08.0	51
	11.3	50
	10 11.2	60
	14.2	60
	11 06.9	67
	10.5	66
	12 16.9	76
	19.8	76
	13 09.5	82
	12.5	82

Date	Time	θ
	h m	° '
8	17 44.7	56 55.5
	49.0	55.6
	23 33.4	54.7
	36.4	54.8
9	39.7	54.8
	5 40.5	55.1
	43.0	55.1
	11 26.3	55.2
	29.2	55.4

No. 14. Siranuka (白 糠)

Lat.=42° 57' 22" N., Long.=144° 03' 37" E.

Height=7 m

Aug. 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
20	h m	° '
	20 05.5	7 42.8
	08.1	42.8
	58.8	42.6
	21 01.7	42.5
	22 00.9	43.3
	05.3	43.3
	59.2	42.5
	23 02.0	42.5
	0 15.9	43.1
21	18.5	42.7
	1 09.0	41.8
	11.9	41.7
	2 00.9	42.5
	04.2	42.6
	59.0	42.1
	3 01.7	42.2
	4 00.5	42.1
	03.8	42.0
	5 03.5	41.3
	06.2	41.3
	59.1	40.4
	6 01.3	40.4
	7 01.4	39.9
	03.4	39.8
	58.9	40.0
	8 01.1	40.0
	58.3	42.4
	9 00.4	42.5
	59.0	45.0
	10 01.8	45.3
	58.1	47.7
	11 00.7	48.1
	57.7	48.1
	12 00.6	48.4
	13 05.4	48.3
	07.9	48.3
	57.4	47.9
	59.6	47.9
	14 57.1	46.5
	59.2	46.4
	16 00.3	46.9
	02.4	46.9
	17 04.8	43.8
	07.2	43.8
	58.3	42.9
	18 01.5	42.8
	19 01.3	43.0
	03.7	43.0
	20 01.9	40.8
	04.7	40.8
	58.4	42.9
	21 00.7	42.9

Date	Time	H
20	h m	r
	20 15.2	27081
	18.7	83
	21 08.0	83
	10.9	85
	22 22.9	84
	27.0	84
	23 08.6	89
	12.9	90
	0 28.6	79
21	31.8	79
	1 22.2	92
	27.0	93
	2 10.8	86
	15.0	84
	3 08.3	78
	12.6	79
	4 11.7	80
	15.1	81
	5 12.4	83
	16.5	81
	6 09.3	76
	13 1	75
	7 09 4	62
	13.5	60
	8 07.7	55
	11.6	51
	9 06.4	51
	09.8	54
	10 08.8	58
	11.9	56
	11 07.5	61
	10.2	59
	12 07.2	79
	10.8	77
	13 20.0	86
	22.6	87
	14 05.7	82
	08.3	79
	15 05.4	81
	07.8	81
	16 10.0	48
	13.5	50
	17 13.4	63
	16.5	60
	18 10.3	62
	13.4	62
	19 09.9	72
	13.5	71
	20 11.3	78
	15.3	81
	21 06.0	75
	09.4	76

Date	Time	θ
20	h m	° '
	23 24.7	56 30.9
21	28.2	30.9
	5 25.7	31.7
	29.5	31.3
	11 19.8	30.7
	23.7	30.9
	17 27.2	32.2
	35.0	32.5

No. 15. Ikeda (池 田)

Lat.=42° 55' 35" N., Long.=143° 27' 00" E.

Height=15 m

Aug. 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ	
	h m	°	'
17	8 04.1	7	56.4
	07.1		56.5
	59.3		57.2
	9 02.3		57.1
	59.8		58.3
	10 04.3		58.4
	11 01.7	8	1.1
	03.5		1.2
	12 06.5		2.0
	08.4		2.1
	13 00.0		2.8
	02.4		2.9
	58.0		2.4
	14 00.9		2.2
	15 05.9		0.9
	08.7		0.9
	57.2	7	59.7
	59.6		59.6
	16 56.7		59.2
	59.4		59.1
	18 00.0		58.1
	03.1		58.2
	59.4		58.2
	19 02.1		58.4
	59.6		58.0
	20 02.1		58.2
	21 07.5		58.8
	09.7		58.8
	22 11.9		58.4
	14.7		58.4
	23 03.4		58.4
	06.6		58.4
	58.3		58.2
18	0 01.2		58.3
	58.2		58.4
	1 00.1		58.3
	58.1		58.3
	2 01.4		58.3
	58.7		57.9
	3 01.4		57.8
	58.6		57.5
	4 01.8		57.4
	57.7		56.3
	5 00.2		56.3
	6 03.7		54.6
	06.0		54.6
	7 01.0		54.6
	02.9		54.8
	8 01.0		55.9
	03.4		56.0
	9 03.3		57.6
	06.0		57.6

Date	Time	H
	h m	r
17	8 15.2	27055
	18.1	55
	9 12.0	50
	15.4	49
	10 16.0	56
	19.1	56
	11 09.6	66
	12.8	67
	12 14.3	81
	16.9	80
	13 07.8	79
	11.2	78
	14 09.4	86
	13.2	83
	15 16.4	81
	20.1	82
	16 06.7	73
	10.3	72
	17 05.3	68
	08.7	66
	18 11.0	48
	14.2	47
	19 07.0	61
	10.0	63
	20 08.2	78
	11.9	75
	21 15.0	74
	18.1	74
	22 20.9	77
	23.4	77
	23 13.4	84
	16.7	86
18	0 10.0	61
	15.3	63
	1 06.0	83
	09.1	83
	2 08.6	82
	13.0	87
	3 07.7	83
	10.8	83
	4 08.3	79
	12.5	78
	5 06.4	88
	10.1	86
	6 11.9	78
	14.7	76
	7 08.4	67
	11.9	67
	8 11.1	56
	15.5	56
	9 11.2	44
	14.4	47

Date	Time	θ	
	h m	°	'
17	11 25.9	56	30.7
	28.4		31.2
	17 16.6		30.7
	19.5		30.8
18	23 26.8		30.5
	30.0		30.1
	5 18.1		30.5
	21.4		30.2

No. 16. Tomikawa (富川)

Lat.=42° 30' 42" N., Long.=142° 02' 27" E.

Height=7 m

Aug. 1954

Inst. No. 21 Coil A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Declination			Horizontal Intensity			Dip		
Date	Time	δ	Date	Time	H	Date	Time	θ
11	^h 8 ^m 03.9	^o 8 ['] 29.0	11	^h 8 ^m 16.3	^r 27403	11	^h 11 ^m 42.8	^o 56 ['] 23.2
	06.5	28.5		19.6	01		47.8	23.1
	58.1	30.5		9 11.6	399		17 41.2	21.8
	9 01.8	30.8		16.5	99		45.2	21.4
	58.4	33.9		10 07.6	95		23 31.0	21.1
	10 00.9	34.4		11.6	96		35.7	21.2
	56.9	35.7		11 09.3	99	12	5 33.0	22.7
	59.3	35.8		13.0	96		36.9	23.0
	12 04.4	36.3		12 14.3	93			
	06.8	36.5		17.9	94			
	13 08.3	35.2		13 17.4	98			
	10.7	35.4		21.4	98			
	14 01.8	33.8		14 13.9	413			
	05.0	33.9		17.1	10			
	15 01.4	33.1		15 11.2	17			
	04.2	33.0		14.5	18			
	16 00.2	32.7		16 08.4	13			
	02.5	32.6		11.9	11			
	58.3	31.6		17 07.3	13			
	17 00.8	31.6		10.8	11			
	18 00.1	31.5		18 09.6	10			
	03.1	31.4		12.7	09			
	19 04.9	29.9		19 14.1	12			
	07.7	30.1		17.7	12			
	20 00.8	31.7		20 08.4	12			
	02.7	31.7		12.7	13			
	21 01.9	32.0		21 11.1	09			
	04.6	32.1		14.2	09			
	22 01.4	31.7		22 08.0	15			
	03.3	31.7		11.2	15			
	23 00.6	31.8		23 11.0	15			
	04.0	31.7		15.8	15			
	58.9	31.7	12	0 10.2	14			
	12 0 02.1	31.6		14.2	13			
	58.4	31.3		1 07.4	17			
	1 01.1	31.3		10.4	17			
	58.8	30.2		2 07.0	13			
	2 01.2	30.2		11.3	12			
	3 01.9	30.5		3 11.1	13			
	05.2	30.4		14.7	13			
	57.4	30.2		4 07.1	11			
	4 00.9	30.2		10.2	12			
	59.4	29.9		5 13.4	09			
	5 01.2	29.8		16.6	09			
	57.7	29.0		6 07.4	05			
	6 00.2	28.8		11.4	02			
	7 03.5	29.2		7 12.1	395			
	06.2	29.1		15.2	95			
	59.1	29.2		8 08.0	87			
	8 01.9	29.2		11.2	87			
	56.2	30.4		9 04.5	78			
	58.4	30.7		08.6	75			
	9 56.3	33.9		10 04.9	86			
	59.0	34.2		07.8	89			

No. 17. Setana (瀬 棚)

Lat.=42° 27' 10" N., Long.=139° 51' 30" E.

Height=10 m

July 1954.

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
5	^h ^m	[°] [']
	11 15.7	7 57.7
	18.4	57.7
	58.8	59.4
	12 01.3	59.5
	13 02.1	8 0.7
	04.2	0.7
	59.6	1.0
	14 01.7	0.8
	59.9	0.5
	15 02.4	0.5
	58.8	7 59.8
	16 02.4	59.4
	17 00.5	58.4
	02.7	58.4
	18 04.1	57.6
	06.1	57.6
	19 00.1	57.5
	02.5	57.5
	20 00.1	57.1
	02.7	57.4
	59.7	57.3
	21 02.2	57.3
	22 11.4	57.4
6	13.5	57.4
	23 00.3	56.8
	02.6	56.7
	58.8	57.1
	0 01.0	57.0
	59.5	56.9
	1 02.0	56.9
	2 02.1	56.4
	05.1	56.2
	3 38.7	55.3
	41.5	55.3
	4 02.5	55.7
	04.9	55.7
	58.9	54.1
	5 02.4	54.2
	6 03.1	54.0
	05.6	54.0
	59.8	54.1
	7 02.2	54.0
	8 02.6	53.6
	04.6	53.6
	9 00.0	53.8
	03.7	53.7
	10 00.1	55.6
	02.4	55.6
	58.8	57.6
	11 01.5	57.6
	12 04.9	59.0
	07.1	58.9

Date	Time	H
5	^h ^m	^r
	12 10.2	27791
	14.7	93
	21.4	95
	13 26.8	804
	30.1	02
	14 22.4	13
	26.2	16
	29.6	16
	15 13.1	16
	15.9	18
	16 17.8	25
	21.9	23
	25.6	23
	17 19.7	23
	23.9	23
	18 15.0	18
	18.7	18
	19 15.5	18
	19.0	21
	23.8	20
	20 11.4	25
	14.4	24
	21 11.1	27
6	15.6	27
	22 25.7	25
	28.8	23
	32.8	22
	23 17.0	23
	21.2	24
	0 11.1	18
	15.8	18
	1 15.9	21
	19.9	21
	2 15.1	25
	17.8	25
	3 53.2	23
	56.0	23
	4 21.4	20
	24.8	24
	29.3	23
	5 11.9	18
	15.5	18
	6 19.5	11
	23.1	11
	7 11.9	53
	16.1	52
	8 22.1	798
	25.8	98
	9 33.2	94
	36.9	93
	10 18.2	89
	22.5	88
	11 09.2	97
	13.0	97
	12 25.5	807
	29.1	08
	34.9	07

Date	Time	θ
5	^h ^m	[°] [']
	17 49.7	56 9.6
	53.3	9.1
	55.7	9.1
6	23 31.8	8.8
	36.8	8.9
	5 29.0	8.2
	37.9	8.3
	11 44.1	9.3
	46.8	9.5

No. 18. Muroran (室 蘭)

Lat.=42° 19' 28" N., Long.=140° 58' 01" E.

Height=45 m

Aug. 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ	
	^h ^m	[°] [']	
7	9 04.5	9	1.4
	07.5		1.9
	10 05.6		4.4
	08.1		4.4
	11 13.5		6.2
	16.7		6.3
	12 01.3		7.4
	04.1		7.4
	13 02.3		6.2
	04.4		6.2
	14 00.8		5.5
	03.2		5.4
	57.6		4.0
	15 00.2		4.1
	16 00.6		3.1
	03.0		3.0
	17 27.1		1.3
	29.4		1.3
	18 05.4		1.1
	08.1		1.2
	51.8		0.4
	56.6		0.3
	19 59.1		1.2
	20 01.4		1.2
	57.8		0.7
	21 00.4		0.7
	22 13.1		0.9
	15.8		1.0
	23 05.5		0.4
	08.3		0.4
8	0 09.0		0.7
	11.3		0.7
	1 00.7		0.8
	03.7		0.6
	59.9		0.2
	2 02.8		0.2
	58.2		0.2
	3 02.6		0.1
	59.8		0.5
	4 02.5		0.6
	5 05.7		0.2
	08.4		0.2
	6 01.6	8	58.8
	06.2		58.6
	58.4		58.6
	7 02.0		58.1
	8 06.6		59.2
	09.1		59.2
	9 04.4	9	0.9
	06.6		0.9
	10 05.1		2.6
	07.5		2.6

Date	Time	H
	^h ^m	^r
7	9 17.1	27865
	20.7	69
	10 16.0	66
	20.3	68
	11 23.2	73
	26.5	74
	12 10.7	75
	13.5	75
	13 14.9	92
	18.3	91
	14 10.5	907
	13.9	06
	15 06.7	01
	10.4	00
	18 36.4	890
	39.2	89
	19 00.0	74
	03.5	74
	20 09.1	70
	12.6	70
	21 51.8	70
	22 04.5	75
	30.6	81
	37.8	67
	42.8	80
	23 37.0	75
	40.5	76
8	0 22.0	904
	31.0	04
	1 26.3	892
	31.7	97
	2 09.9	89
	17.5	89
	3 14.9	902
	22.5	896
	4 11.3	88
	17.2	90
	5 16.8	93
	22.7	92
	6 16.6	80
	21.9	79
	7 12.2	75
	16.1	75
	8 34.2	66
	57.2	74
	9 55.5	45
	10 31.7	73
	38.8	78

Date	Time	θ	
	^h ^m	[°] [']	
7	11 35.8	56	13.3
	39.4		13.2
	17 38.7		11.6
	42.4		11.7
	23 50.7		13.1
8	53.7		13.1
	5 38.7		13.7
	43.5		13.7

No. 19. Hiroo (広尾)

Lat.=42° 16' 00" N., Long.=143° 18' 00" E.

Height=60 m

Aug. 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
14	^h ^m	[°] [']
	23 13.2	7 57.0
15	15.9	57.0
	0 10.3	56.7
	12.9	56.7
	1 02.1	56.2
	04.5	56.3
	57.5	56.3
	2 00.9	56.2
	56.6	56.2
	59.6	56.2
	3 58.5	56.4
	4 01.0	56.4
	57.8	56.6
	5 02.2	55.6
	6 05.6	54.9
	09.4	54.9
	7 04.6	55.5
	07.3	55.4
	8 11.2	56.6
	13.9	56.6
	9 03.1	58.1
	06.7	58.1
	57.8	59.7
	10 01.2	59.6
	11 01.4	8 0.2
	04.2	0.5
	12 02.7	1.2
	05.3	1.2
	58.1	1.7
16	13 00.8	1.9
	14 00.2	0.7
	03.5	0.5
	15 10.0	7 59.1
	13.2	59.1
	16 02.6	58.0
	06.7	57.9
	17 02.3	57.9
	05.4	57.9
	58.5	57.4
	18 01.3	57.4
	19 13.9	57.3
	17.1	57.3
	20 02.6	57.1
	06.4	56.9
	21 00.0	57.0
	03.0	56.9
	22 03.8	57.0
	06.9	57.0
	58.5	56.7
	23 02.3	56.8
	0 00.9	56.8
	03.6	56.8

Date	Time	H
15	^h ^m ^r	
	0 19.6	27539
	23.2	38
	1 10.6	32
	16.4	33
	2 14.3	36
	22.7	35
	4 24.0	32
	27.6	32
	5 12.6	35
	19.7	31
	6 17.2	23
	21.3	21
	7 17.7	16
	21.7	13
	8 23.0	02
	26.3	02
	9 13.0	00
	16.9	00
	10 08.4	10
	11.6	12
	11 10.3	17
	13.7	18
	12 11.3	25
	13.5	27
	13 07.8	29
	11.2	30
	14 10.1	36
	13.5	37
	15 19.0	41
	22.5	41
	16 13.0	34
	15.7	33
	17 13.2	27
	16.4	27
	18 06.9	30
	10.1	28
	19 25.0	32
	28.5	31
	20 16.0	36
	19.4	35
	21 10.9	37
	14.3	36
	22 14.1	37
	17.8	36
	23 09.4	41
	13.7	39
16	0 09.3	37
	12.3	38

Date	Time	θ
15	^h ^m [°] [']	
	5 36.5	55 41.5
	40.2	41.8
	11 22.7	41.3
	25.6	41.2
	17 24.3	40.2
	27.0	40.2
	23 30.5	40.2
	38.6	40.2

No. 20. Mori (森)

Lat.=42° 06' 06" N., Long.=140° 34' 48" E.

Height=20 m

Aug. 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
3	h m 8 58.0	° ' 8 5.1
	9 00.7	5.1
	10 00.2	7.0
	03.1	6.9
	57.7	8.3
	11 00.3	8.3
	12 05.1	9.6
	07.8	9.6
	13 02.6	9.7
	05.3	9.5
	59.7	8.8
	14 02.0	8.7
	15 02.2	8.3
	05.3	8.5
	16 00.1	7.7
	02.3	7.6
	17 03.8	6.9
	06.0	6.9
	58.2	6.8
	18 00.8	6.9
	19 03.6	6.3
	06.1	6.4
	58.9	6.4
	20 01.6	6.4
	21 01.2	6.6
	03.7	6.6
	22 02.9	6.3
	05.5	6.4
	23 04.9	6.2
	07.9	6.2
4	0 03.7	6.3
	06.1	6.3
	1 02.2	5.6
	05.2	5.7
	2 01.9	5.4
	05.0	5.5
	3 01.0	4.6
	03.5	4.5
	4 00.0	4.4
	04.1	4.6
	59.2	3.8
	5 01.9	3.8
	57.6	3.0
	6 00.8	3.0
	7 05.8	1.1
	08.8	0.9
	58.9	1.0
	8 01.8	1.0
	58.6	2.4
	9 00.9	2.6
	59.3	5.8
	10 02.0	5.8
	11 03.6	7.8
	06.3	8.0

Date	Time	H
3	h m 9 09.0	r 27621
	13.6	20
	10 09.3	25
	12.8	26
	11 10.7	46
	14.9	48
	12 13.5	55
	16.2	52
	13 13.4	59
	21.7	60
	14 08.2	60
	10.7	57
	15 11.4	62
	15.2	63
	16 09.2	62
	12.7	61
	17 11.7	64
	14.5	66
	18 06.5	62
	09.5	64
	19 16.2	59
	19.5	59
	20 08.5	44
	11.8	46
	21 09.3	59
	12.9	56
	22 13.5	57
	17.4	57
	23 15.4	59
	18.6	59
4	0 12.7	62
	17.2	60
	1 14.4	59
	18.0	60
	2 11.8	58
	15.4	57
	3 12.5	59
	16.2	59
	4 13.6	57
	17.0	59
	5 10.1	55
	13.3	56
	6 08.2	55
	11.4	52
	7 14.3	56
	17.1	55
	8 11.1	55
	13.8	54
	9 07.0	48
	09.7	48
	10 08.4	43
	11.5	46
	11 12.3	52
	15.6	53

Date	Time	θ
3	h m 11 28.3	° ' 56 4.6
	32.7	4.8
	17 22.5	4.6
	25.9	4.6
	23 30.5	3.8
4	33.0	3.4
	5 23.6	4.7
	27.1	4.4

No. 21. Esan (惠 山)

Lat.=41° 47' 10" N., Long.=141° 09' 10" E.

Height=70 m

July 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	$^{\circ}$ '
30	9 17.9	7 14.5
		14.6
		16.8
	10 01.0	16.9
	11 01.8	19.9
		19.9
	12 02.5	20.0
		20.1
		19.0
	13 03.8	18.9
	14 01.2	18.8
		18.8
	15 01.8	17.8
		17.7
		16.1
	16 01.5	16.1
	17 01.7	15.4
		15.4
	18 01.2	15.2
		15.3
		15.9
	19 00.7	15.9
	20 00.9	16.2
		16.3
		15.5
	21 02.5	15.6
	22 00.8	15.9
		15.8
	23 03.7	16.3
31		16.3
	0 10.5	15.4
		15.6
	1 10.7	15.2
		15.1
	2 16.4	15.0
		15.0
		14.8
	3 02.0	14.7
	4 01.8	14.0
		14.0
	5 00.1	12.8
		12.9
	6 03.9	11.8
		11.7
		11.8
	7 02.1	12.0
	8 05.2	12.5
		12.5
		14.2
	9 00.7	14.3
	10 02.4	17.1
		17.1
	11 01.4	18.5
		18.6

Date	Time	H
	h m	r
30	9 30.9	27923
		20
		17
	10 08.7	17
		17
	11 12.5	33
		38
		38
	12 09.7	55
		54
	13 13.2	67
		64
	14 10.3	67
		69
	15 12.9	67
		71
	16 08.5	69
		68
	17 10.1	61
		63
	18 09.3	61
		62
	19 06.9	57
		60
	20 10.5	60
		60
	21 08.9	63
		63
	22 13.9	68
		68
	23 16.2	72
31		71
	0 21.0	67
		65
	1 20.2	65
		63
	2 26.3	59
		60
	3 07.6	54
		57
	4 18.7	67
		67
	5 13.7	69
		65
	6 12.4	68
		65
	7 09.9	57
		56
	8 15.9	45
		45
	9 06.6	38
		38
	10 10.3	34
		34
	11 09.0	36
		36

Date	Time	θ
	h m	$^{\circ}$ '
30	11 40.7	55 33.2
		33.3
	17 22.4	34.0
		34.0
	23 25.1	34.3
31		34.6
	5 31.3	34.6
		34.5

No. 22. Ōma (大 間)

Lat.=41° 32' 01" N., Long.=140° 55' 31" E.

Height=40 m

July 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
21	^h 8 ^m 59.5	[°] 8 ['] 30.1
	9 01.6	30.1
	57.5	32.2
	10 00.3	32.4
	58.8	34.9
	11 01.1	35.0
	12 01.1	36.9
	04.4	38.2
	58.8	38.9
	13 01.7	39.0
	57.4	38.6
	14 00.7	38.4
	58.4	37.5
	15 02.2	37.5
	58.6	36.1
	16 01.1	36.1
	57.4	35.1
	17 00.0	35.0
	18 04.3	34.3
	06.9	34.1
	19 03.5	34.0
	16.1	34.0
	58.4	33.9
	20 01.0	33.9
	58.1	33.6
	21 00.6	33.5
	22 04.1	33.6
	07.0	33.6
	58.4	33.1
	23 00.8	33.1
	58.7	33.0
22	0 00.9	33.2
	1 02.5	32.7
	07.0	32.3
	59.4	32.2
	2 02.2	32.3
	3 00.2	32.2
	03.3	32.2
	4 00.1	31.9
	02.4	31.8
	5 03.6	31.0
	06.3	30.9
	58.2	29.8
	6 01.4	29.8
	58.9	29.2
	7 02.6	29.5
	8 05.5	29.1
	09.0	29.0
	58.7	30.9
	9 02.5	30.9
	58.9	32.9
	10 01.1	32.9
	11 01.5	34.4
	04.4	34.4

Date	Time	H
21	^h 9 ^m 07.9	^r 27530
	11.1	33
	10 07.4	22
	11.3	24
	11 07.2	37
	09.8	37
	12 12.1	54
	15.2	55
	13 08.6	68
	12.6	66
	14 07.8	86
	11.1	85
	15 08.2	91
	11.7	89
	16 08.9	81
	12.8	83
	17 09.3	85
	12.2	86
	18 13.4	77
	16.9	77
	19 11.7	75
	14.4	73
	20 11.7	82
	14.4	82
	21 05.6	80
	08.2	80
	22 13.4	79
	17.5	82
	23 05.8	78
	08.7	77
22	0 07.3	71
	10.1	71
	1 14.0	70
	17.4	71
	2 07.9	76
	11.0	76
	3 09.7	77
	13.1	77
	4 08.4	77
	12.2	77
	5 11.6	89
	14.9	89
	6 07.2	75
	10.2	76
	7 10.4	60
	13.6	59
	8 15.4	51
	18.5	52
	9 09.8	44
	12.4	45
	10 10.8	49
	15.2	51
	11 12.8	47
	16.4	46

Date	Time	θ
21	^h 11 ^m 17.8	[°] 55 ['] 29.1
	20.9	29.2
	17 22.2	25.5
	24.8	25.6
	23 18.1	25.7
22	22.2	25.1
	27.0	25.0
	5 24.0	24.5
	26.5	24.5

No. 23. Matumae (松 前)

Lat.=41° 25' 42" N., Long.=140° 06' 41" E.

Height=25 m

July 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ	
	h m	° '	
26	7 14.3	8 4.5	
	16.4	4.3	
	8 03.0	4.3	
	05.7	4.4	
	9 02.3	5.9	
	04.5	6.0	
	10 01.3	7.7	
	04.0	7.7	
	11 01.4	8.4	
	05.8	8.7	
	12 03.1	10.1	
	06.0	10.1	
	13 01.7	10.2	
	04.7	10.3	
	14 03.4	9.6	
	07.4	9.4	
	15 02.5	7.9	
	05.6	7.9	
	16 04.3	6.8	
	07.7	6.7	
	58.1	6.0	
	17 00.8	6.1	
	18 02.9	5.6	
	05.3	5.6	
27	19 05.6	6.1	
	09.1	6.1	
	20 00.4	6.2	
	03.2	6.2	
	21 04.2	6.0	
	07.6	5.9	
	58.3	6.3	
	22 01.0	6.2	
	58.8	5.5	
	23 01.5	5.4	
	0 01.7	6.1	
	04.5	6.2	
	1 00.7	6.1	
	03.1	5.9	
	57.6	5.6	
	2 00.9	5.5	
	3 15.6	5.2	
	18.5	5.2	
	4 01.9	4.7	
	04.4	4.7	
	5 06.4	3.8	
	09.2	3.9	
	6 08.5	3.0	
	11.7	3.3	
	7 04.7	3.3	
	07.5	3.4	
	8 13.7	4.3	
	16.5	4.4	

Date	Time	H
	h m	r
26	7 27.1	28419
	30.9	19
	8 15.7	18
	19.2	16
	9 11.5	11
	15.5	10
	10 13.3	11
	18.3	13
	11 14.5	17
	19.6	18
	12 16.2	18
	19.8	18
	13 18.3	22
	21.4	24
	14 16.6	35
	19.5	35
	15 13.3	40
	20.7	36
	16 17.6	37
	20.8	35
	17 13.6	33
	16.6	36
	18 11.3	35
	14.1	36
27	19 15.5	37
	21.1	35
	20 12.5	28
	17.6	28
	21 14.2	08
	18.2	09
	22 09.4	15
	12.5	15
	23 12.2	30
	15.1	32
	0 12.8	34
	16.4	32
	1 10.4	36
	14.6	35
	2 14.6	32
	3 26.2	32
	31.3	39
	4 20.3	35
	25.3	39
	5 19.1	38
	24.1	37
	6 19.9	33
	23.6	31
	7 13.6	18
	17.3	17
	8 23.1	13
	26.9	15

Date	Time	θ	
	h m	° '	
26	11 38.5	54 49.7	
	41.0	49.5	
	17 29.3	49.0	
	33.2	48.9	
27	23 28.9	49.1	
	32.9	48.7	
	5 34.5	49.4	
	40.8	49.5	

No. 24. Tanabu (田名部)

Lat.=41° 16' 52" N., Long.=141° 12' 45" E.

Height=4 m

July 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
	^h ^m	[°] [']
18	9 04.5	8 25.9
	07.3	26.7
	59.2	30.6
	10 01.5	30.9
	58.5	32.2
	11 01.6	31.8
	58.5	33.4
	12 00.6	33.4
	59.7	33.5
	13 02.5	33.5
	14 05.1	32.0
	08.5	31.7
	59.7	31.3
	15 02.5	31.2
	59.8	31.2
	16 03.2	31.2
	58.2	30.2
	17 01.1	30.2
	58.8	29.7
	18 01.3	29.7
	59.4	29.8
	19 02.3	29.7
	58.1	29.4
	20 01.2	29.5
	21 00.2	29.5
	03.4	29.4
	22 00.3	29.3
	03.1	29.4
	23 05.6	29.2
	09.0	29.2
	57.2	29.4
19	0 01.2	29.3
	1 02.1	29.2
	04.8	29.2
	58.6	29.0
	2 01.6	29.0
	3 00.1	28.6
	03.0	28.7
	59.6	28.1
	4 03.1	28.2
	5 00.0	27.4
	02.3	27.3
	57.8	27.1
	6 00.7	26.8
	7 03.5	25.3
	06.7	25.3
	8 01.3	25.7
	04.1	25.7
	59.2	26.1
	9 01.5	26.3
	58.9	28.2
	10 01.1	28.2
	11 03.3	30.2
	05.3	30.4
	58.0	32.4
	12 00.2	32.5
	13 10.2	33.3
	10.8	33.4

Date	Time	H
	^h ^m	^r
18	9 15.6	27991
	19.1	90
	10 08.5	28010
	12.5	14
	11 08.9	14
	11.9	15
	12 07.7	11
	11.3	12
	13 09.1	16
	11.8	16
	14 15.5	34
	18.2	31
	15 07.5	27
	10.1	28
	16 11.8	27
	14.9	25
	17 12.8	21
	16.1	23
	18 10.8	25
	16.2	23
	19 10.6	27
	14.1	30
	20 08.5	29
	12.1	29
	21 08.6	27
	11.7	26
	22 11.1	27
	14.7	24
	23 17.2	27
	20.6	27
19	0 05.2	26
	08.2	27
	1 16.7	25
	20.4	24
	2 08.4	23
	12.1	24
	3 09.6	30
	13.4	30
	4 09.9	27
	13.0	27
	5 09.6	25
	13.4	28
	6 09.4	18
	12.5	18
	7 12.6	04
	15.6	03
	8 09.5	27990
	12.2	90
	9 08.0	82
	11.0	82
	10 07.9	78
	12.6	80
	11 12.1	88
	15.2	89
	12 05.0	93
	07.9	92
	13 17.8	28011
	20.4	12

Date	Time	θ
	^h ^m	[°] [']
18	11 22.4	55 2.8
	25.5	2.7
	17 26.9	1.6
	30.8	2.2
19	23 32.4	2.4
	35.2	2.7
	5 26.6	2.8
	31.3	2.6

COMPLETE LIST OF MAGNETIC OBSERVATION

77

No. 25. Nohezi (野辺地)

Lat.=40° 51' 32" N., Long.=141° 08' 13. E.

Height=15 m

July 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ	
	h m	°	'
15	9 02.8	8	3.3
			3.3
	10 00.8		5.6
			5.5
	59.5		5.9
	11 02.2		5.9
	12 02.6		7.0
			7.0
	05.1		7.0
	58.7		8.0
	13 01.0		8.3
	14 03.0		7.9
			7 8
	06.3		6 9
	59.3		6.8
	15 01.8		6.1
	58.4		5.6
	16 01.4		4.0
	17 02.4		3.8
			3.9
	58.9		3.8
	18 01.4		3.6
	19 00.2		3.7
	03.1		4.5
	20 04.1		4.4
			4.2
	58.3		4.2
	21 01.4		4.2
	22 00.0		4.1
			4.3
	03.2		4.3
	59.0		3.5
16	23 02.0		3.3
	0 00.0		3.4
			3.4
	1 00.2		3.0
	03.4		2.9
	2 00.9		2.6
	04.3		2.5
	58.5		2.1
	3 00.9		2.2
	4 01.1		1.8
	04.1		1.8
	5 00.9		1.0
	03.6		0.7
	6 04.3		0.3
	06.6		0.5
	7 01.3		1.4
	04.6		1.4
	8 00.2		1.9
	02.9		2.1
	9 01.1		3.8
	03.4		3.8
	10 02.6		5.5
	05.0		5.4
	59.8		
	11 02.4		

Date	Time	H
	h m	r
15	9 04.6	28182
		84
	10 17.7	
	12.4	88
		90
	16.6	
	11 09.2	201
		02
	14.0	
	12 11.0	18
		18
	14.2	
	13 09.7	23
		23
	13.4	
	14 13.2	17
		14
	17.6	
	15 09.1	12
		10
	13.3	
	16 08.1	199
		99
	11.5	
	17 10.5	202
		01
	13.1	
	18 06.4	05
		03
	08.9	
	19 11.4	08
		08
	15.1	
	20 14.3	181
		81
	17.8	
	21 08.3	97
		99
	12.1	
	22 14.4	208
		07
	18.7	
	23 11.6	06
		02
	16.2	
16	0 08.9	18
		17
	11.5	
	1 10.3	12
		12
	13.0	
	2 09.8	14
		14
	12.7	
	3 06.5	14
		15
	11.4	
	4 11.6	16
		19
	16.4	
	5 13.4	14
		14
	17.3	
	6 13.4	10
		10
	17.6	
	7 10.9	09
		07
	14.6	
	8 09.7	04
		04
	13.4	
	9 10.0	193
		94
	13.1	
	10 10.6	94
		95
	13.5	
	11 08.9	96
		96
	12.0	

Date	Time	θ	
	h m	°	'
15	11 30.4	54	26.8
			27.2
	34.5		
	17 23.7		28.4
			28.3
16	23 26.7		28.6
			28.5
	30.4		
	5 35.0		27.4
			27.2
	26.8		
	30.8		

No. 26. Azigasawa (鯨ヶ沢)

Lat.=40° 46' 31" N., Long.=140° 12' 54" E.

Height=20 m

July 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ	Date	Time	H	Date	Time	θ
11	^h 9 ^m 03.4	[°] 7 ['] 45.9	11	^h 9 ^m 18.3	^r 28299	11	^h 11 ^m 27.1	[°] 54 ['] 40.0
	05.8	45.8		26.4	98		31.0	39.8
	10 00.4	47.4		10 14.0	98		17 28.8	40.2
	03.2	47.6		17.8	99	12	33.8	39.8
	11 03.3	49.0		11 12.3	307		23 27.1	40.3
	06.4	48.8		15.5	08		31.7	40.0
	12 05.9	50.7		12 13.9	08	12	5 22.8	40.6
	08.1	50.7		16.6	08		26.6	40.3
	13 01.0	50.7		13 14.1	17			
	03.3	50.9		18.0	17			
	14 01.4	50.9		14 10.7	23			
	03.9	51.1		14.0	20			
	15 00.4	51.1		15 10.0	15			
	02.8	51.2		13.9	17			
	16 00.1	50.6		16 08.2	19			
	02.8	50.5		11.7	17			
	58.3	49.5		17 08.2	15			
	17 01.1	49.6		12.6	17			
	59.6	49.3		18 15.9	20			
	18 09.9	49.3		19.5	20			
	19 01.9	49.2		19 09.6	24			
	03.9	49.2		13.0	20			
	59.3	48.7		20 06.4	18			
	20 01.5	48.8		13.4	17			
	58.6	48.6		21 08.2	22			
	21 01.4	48.5		10.8	22			
	22 00.1	48.3		22 16.4	20			
	02.7	48.3		20.7	20			
	23 01.0	48.6		23 11.9	16			
	14.1	48.6		15.2	16			
	59.3	47.9	12	0 10.7	17			
12	0 02.1	48.0		14.2	17			
	1 16.8	47.6		1 30.7	15			
	22.4	47.5		33.8	18			
	2 01.3	47.1		2 09.6	22			
	04.1	47.2		12.3	21			
	59.8	46.7		3 07.1	26			
	3 01.9	46.8		10.0	25			
	4 00.8	46.6		4 10.9	23			
	03.9	46.7		14.4	22			
	59.3	46.3		5 07.5	27			
	5 01.4	46.1		12.0	26			
	58.8	45.7		6 08.0	23			
	6 01.3	45.6		10.8	23			
	7 04.6	45.3		7 15.8	12			
	07.1	45.2		18.4	15			
	8 00.5	45.4		8 09.0	00			
	02.9	45.3		12.6	299			
	9 01.7	46.0		9 12.0	77			
	04.4	46.4		21.4	79			
	10 04.3	48.5		10 13.0	83			
	06.7	48.5		15.8	85			

No. 27. Ōdate (大 館)

Lat.=40° 16' 11" N., Long.=140° 32' 17" E.

Height=59 m

July 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
7	9 03.0	7 49.4
	06.1	49.4
	10 01.5	51.7
	04.3	51.8
	11 01.2	54.3
	05.2	54.3
	12 01.9	55.2
	04.5	55.2
	13 01.1	55.2
	03.6	55.3
	14 00.5	55.3
	03.7	55.4
	15 00.6	54.6
	03.5	54.6
	16 05.2	53.5
	08.1	53.5
	17 02.1	52.5
	04.6	52.5
	18 04.5	51.4
	07.7	51.3
	19 03.4	50.2
	08.4	50.4
	20 01.4	50.2
	04.4	50.0
	59.8	50.9
	21 03.1	50.9
	22 01.6	51.2
	04.7	51.0
	23 03.4	51.2
	06.0	51.3
8	0 13.9	50.8
	16.8	50.9
	1 05.5	50.9
	07.8	51.0
	2 10.2	50.6
	12.7	50.7
	3 03.7	50.3
	07.1	50.4
	4 02.7	50.3
	06.3	50.3
	5 00.7	49.6
	04.3	49.5
	6 04.0	48.2
	07.2	48.0
	7 04.5	47.7
	07.8	47.6
	8 02.8	47.4
	06.2	47.5
	9 00.5	48.3
	02.7	48.4
	10 02.5	50.1
	06.6	50.3
	11 04.2	51.6
	07.1	52.1

Date	Time	H
	h m	r
7	9 14.8	28428
	20.2	30
	10 11.5	20
	14.7	20
	11 17.8	20
	21.4	17
	12 13.5	24
	14.5	24
	13 12.4	34
	15.5	37
	14 09.7	43
	18.6	42
	22.1	40
	15 10.6	47
	13.3	47
	16 16.7	41
	21.0	43
	17 10.8	52
	14.5	48
	18 13.9	37
	16.8	37
	15 19.6	30
	22.6	29
	20 11.2	24
	14.2	25
	21 09.6	41
	12.3	41
	22 11.7	39
	15.1	38
	23 12.2	41
	16.3	41
8	0 22.8	45
	26.3	45
	1 16.7	47
	19.8	50
	2 18.9	47
	21.8	49
	3 16.7	49
	21.8	44
	4 15.5	44
	18.7	49
	5 10.4	39
	14.1	36
	6 15.3	43
	19.5	46
	7 15.8	33
	19.0	33
	8 14.4	33
	18.2	33
	9 08.9	28
	12.3	30
	10 18.2	33
	21.6	35
	11 14.3	41
	18.1	45

Date	Time	θ
	h m	° '
7	11 32.1	53 59.3
	35.8	54 0.1
	17 25.0	53 57.4
	29.7	57.8
	23 29.8	58.3
8	32.9	58.2
	5 24.5	58.2
	34.3	58.0

No. 28. Kuzi (久慈)

Lat.=40° 11' 29" N., Long.=141° 47' 03" E.
Height=4 m

July 1954
Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ	
	^h ^m	[°] [']	[°] [']
1	14 31.3	* 7	21.5
	33.7		21.5
	15 07.7		21.2
	11.2		21.1
	16 02.8		20.5
	05.7		20.5
	17 02.2		19.6
	06.2		18.9
	08.7	**	18.9
	18 01.2		19.7
	04.5		19.5
	19 21.3		18.7
	23.2		18.7
	20 05.0		18.2
	07.1		18.2
	21 03.9		18.1
	07.7		18.1
	46.0		17.4
	48.0		17.4
	23 04.6		17.2
	06.9		17.2
	2 0 21.9		17.1
2	26.0		17.1
	1 01.1		17.6
	03.8		17.6
	2 03.8		17.4
	06.2		17.4
	3 01.0		17.2
	03.3		17.4
	4 02.9		16.5
	05.7		16.5
	5 00.0		16.8
	02.5		16.6
	6 22.3		15.7
	24.9		15.7
	7 01.3		15.3
	04.7		15.4
	8 02.3		14.6
	04.6		14.8
	9 01.9		15.9
	04.2		16.2
	10 00.8		18.5
	03.3		18.8
	05.6		19.0
	07.4		19.0
	11 00.0		19.3
	02.4		19.3
	12 12.1		21.0
	13.9		21.0
	59.3		21.5
	13 01.2		21.5
	14 00.4		21.8
	03.4		21.8
	59.8		21.7
	15 02.7		21.6
	42.6		20.1
	44.7		20.2

Date	Time	H
	^h ^m	^r
1	14 48.6	28592
	53.1	90
	15 47.6	77
	54.1	77
	16 32.9	88
	39.9	88
	17 44.0	98
	46.8	94
	51.1	91
	18 34.5	87
	39.1	87
	33.0	97
	19 36.7	98
	20 51.9	602
	55.8	04
	21 21.1	04
	26.0	07
	30.9	06
	35.1	06
	22 27.0	09
	30.9	09
	2 0 39.9	09
	43.2	09
	1 28.8	05
2	32.1	05
	2 21.2	09
	25.7	09
	3 23.8	10
	28.1	11
	4 27.1	34
	31.9	34
	5 13.6	13
	18.1	13
	6 41.2	11
	46.8	11
	7 18.2	05
	21.2	04
	8 27.1	593
	30.7	93
	9 26.2	83
	29.7	85
	36.9	85
	10 21.3	88
	24.2	88
	11 22.4	95
	25.1	95
	12 27.7	96
	31.6	96
	13 36.5	604
	39.6	04
	14 28.2	04
	31.1	06
	15 31.7	07
	37.7	07

Date	Time	θ
	^h ^m	[°] [']
1	19 02.0	53 54.7
	04.8	54.8
2	23 52.4	54.0
	1 04.1	53.6
	09.9	53.8
	5 47.4	53.0
	57.7	53.0
	11 44.3	55.7
	51.1	56.3

* ~ ** Mag. B

No. 29. Akita (秋 田)

Lat.=39° 43' 09" N., Long.=140° 06' 07" E.

Height=5 m

July 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	$^{\circ}$ '
4	9 04.3	7 20.2
	07.6	19.8
	57.8	21.2
	10 00.4	21.4
	59.2	23.9
	11 01.6	24.5
	12 04.1	25.1
	06.8	25.1
	57.7	26.3
	13 00.0	26.5
	14 00.5	27.3
	02.2	27.4
	15 03.6	27.3
	05.5	27.2
	59.9	25.7
	16 03.0	25.8
	17 00.7	25.0
	03.3	25.2
	18 00.6	23.9
	03.7	24.1
	19 00.5	23.8
	02.7	23.9
	59.4	23.5
	20 02.6	23.6
	21 29.8	23.1
	34.7	23.4
	22 04.4	23.9
	07.3	24.0
	58.8	23.7
	23 01.2	23.7
	59.7	22.2
5	0 01.9	22.1
	1 01.0	22.0
	04.5	21.9
	2 00.0	22.0
	02.2	22.0
	3 00.8	22.1
	02.9	22.1
	4 01.8	22.2
	04.4	22.4
	59.4	22.5
	5 02.8	22.5
	6 04.0	21.6
	06.8	21.4
	7 05.8	20.2
	07.9	19.9
	8 08.9	19.0
	12.0	18.9
	9 01.0	20.0
	02.6	20.1
	10 00.7	21.3
11	03.5	21.5
	01.2	23.3
	03.1	23.1

Date	Time	H
	h m	r
4	9 29.3	28819
	33.3	19
	10 08.5	20
	12.3	21
	11 09.4	10
	13.5	13
	12 13.9	16
	17.8	19
	13 07.9	26
	11.4	26
	14 08.6	34
	12.7	38
	15 11.7	38
	15.1	38
	16 12.5	42
	15.8	37
	17 08.2	38
	11.1	38
	18 09.5	35
	12.7	39
	19 09.7	38
	13.5	41
	20 11.4	38
	15.8	40
	21 42.7	36
	46.3	35
	22 12.6	31
	16.6	35
	23 07.3	38
	10.9	34
5	0 07.3	42
	09.7	41
	1 13.9	38
	18.7	38
	2 10.3	41
	14.2	43
	3 12.3	41
	15.4	43
	4 11.6	42
	15.2	41
	5 09.9	36
	12.7	36
	6 14.5	32
	17.9	32
	7 25.9	22
	30.1	24
	8 20.9	20
	24.7	21
9	11.6	22
	14.4	25
	10 10.3	15
	14.4	15
11	11.0	12
	14.3	12

Date	Time	θ
	h m	$^{\circ}$ '
4	11 26.7	53 23.0
	30.9	23.7
	17 22.5	23.5
	25.6	23.4
5	23 25.3	23.3
	28.6	23.7
	5 21.4	21.7
	25.3	21.9

No. 30. Morioka (盛岡)

Lat.=39° 42' 20" N., Long.=141° 09' 35" E.

Height=120 m

June 1954

Inst. No. 29 Coil 21C Mag. B Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ
24	h m	° '
	18 00.9	7 18.1
	04.3	18.1
	19 00.0	18.1
	02.4	18.1
	20 00.0	18.0
	02.8	18.0
	21 09.0	18.0
	12.6	18.0
	22 01.3	17.8
	04.1	17.8
	23 04.2	17.8
	08.3	17.8
	25 0 08.0	17.7
25	10.4	17.7
	1 03.0	17.2
	05.2	17.2
	2 03.8	16.6
	06.8	16.6
	3 01.5	16.8
	04.0	16.8
	4 05.3	16.1
	08.4	16.1
	5 01.5	15.7
	04.6	15.7
	6 27.3	15.2
	29.8	15.2
	7 00.0	15.6
	03.0	15.6
	8 11.4	16.0
	16.1	16.0
	9 01.4	16.1
	03.4	16.1
	59.9	17.8
	10 02.9	17.7
	11 02.0	18.1
	04.8	18.1
	12 00.4	19.3
	03.0	19.6
	13 02.9	20.4
	05.2	20.3
	14 00.2	21.0
	02.8	21.0
	15 01.8	20.2
	04.3	20.1
	16 02.3	19.6
	04.9	19.5
	17 04.7	18.1
	07.8	18.2
	18 02.6	18.0
	05.2	18.0

Date	Time	H
24	h m	r
	18 31.3	28818
	37.3	18
	19 22.3	19
	27.3	18
	21 32.4	22
	37.1	22
	22 29.3	22
	35.4	26
	41.1	24
	23 20.8	21
	26.4	23
	25 0 28.1	20
	31.9	22
25	1 33.8	24
	38.9	23
	2 30.6	22
	35.3	22
	3 27.8	19
	31.6	18
	4 29.3	24
	32.9	24
	5 30.5	23
	33.6	23
	6 37.6	18
	40.9	18
	7 43.0	20
	47.6	20
	8 34.7	11
	38.5	12
	9 13.0	10
	17.7	08
	24.1	08
	10 41.9	09
	46.2	12
	52.2	12
	11 26.2	29173
	37.3	254
	44.8	179
	13 30.5	28827
	34.0	26
	14 25.2	24
	29.2	24
	15 19.4	27
	23.2	28
	16 21.3	29
	24.3	30
	17 17.1	23
	20.9	25
	25.0	25
	18 16.9	22
	20.7	22

Date	Time	θ
24	h m	° '
	23 50.3	52 56.0
25	55.7	56.0
	6 03.6	56.1
	07.1	56.1
	12 43.8	56.4
	46.7	56.4
	17 46.2	56.6
	48.4	56.8

No. 31. Miyako (宮古)

Lat.=39° 37' 07" N., Long.=141° 57' 39" E.

Height=5 m

June 1954

Inst. No. 29 Coil 21C Mag. B Cell 2 Resist. 2

Declination

Horizontal Intensity

Dip

Date	Time	δ	
	^h ^m	[°]	[']
27	18 19.7	7	26.2
	23.4		25.7
	26.7		26.3
	19 28.7	*	25.9
	33.8		25.8
	20 00.0		26.0
	02.6	**	26.1
	22 00.6		24.8
	03.2		24.7
	59.9		25.0
28	23 01.6		25.0
	0 20.0		24.5
	22.5		24.6
	1 00.0		24.6
	02.8		24.6
	2 00.0		24.6
	02.5		24.6
	3 00.0		24.2
	02.6		24.2
	4 00.0		24.1
	03.9		24.1
	5 00.0		22.8
	02.5		22.7
	6 14.6		21.0
	17.2		21.4
	7 00.0		22.5
	03.1		22.5
	8 00.0		23.6
	02.9		23.9
	9 01.5		25.5
	04.0		25.4
	10 00.7		25.9
	04.4		25.9
	11 00.0		26.5
	02.8		26.5
	12 05.0		28.9
	07.5		28.9
	13 00.0		28.3
	02.4		28.4
	14 00.0		28.3
	02.7		28.3
	15 00.4		28.1
	02.1		28.1
	16 00.0		28.2
	01.7		28.3
	17 02.8		27.0
	05.2		27.0
	18 24.6		26.3
	26.3		26.3
	19 00.3		25.1
	03.3		24.9
	20 00.0		25.3
	02.9		25.3
	21 00.0		25.3
	02.4		25.3

Date	Time	H
	^h ^m	^r
27	18 46.8	28631
	57.2	34
	20 12.9	36
	18.3	35
	22 32.0	45
	38.0	46
	23 23.4	45
	27.6	46
	28 0	45
	36.9	45
28	42.2	45
	1 23.8	43
	28.6	42
	2 26.2	35
	31.7	37
	3 32.4	37
	36.5	37
	4 27.2	37
	30.9	37
	5 22.4	47
	27.2	45
	31.1	46
	6 31.7	48
	35.9	48
	7 39.5	46
	45.4	46
	8 23.1	48
	28.0	45
	32.4	45
	9 25.6	42
	30.0	43
	10 21.9	33
	26.7	34
	11 17.3	29
	23.5	27
	12 33.7	24
	38.0	23
	13 26.2	25
	29.5	25
	35.1	30
	14 30.6	29
	15 23.2	16
	26.5	17
	16 33.4	592
	38.4	94
	43.3	94
	17 19.8	602
	23.1	02
	18 38.1	09
	42.1	09
	19 27.4	18
	31.2	20
	20 24.4	23
	28.4	23
	21 25.7	24
	29.5	23

Date	Time	θ
	^h ^m	[°] [']
27	23 55.1	53 18.0
28	0 07.9	18.0
	5 44.7	18.0
	48.6	18.0
	11 47.1	18.2
	51.3	18.3
	17 50.9	20.6
	56.3	20.6

* ~ ** Mag. A

No. 32. Sakata (酒 田)

Lat.=38° 54' 24" N., Long.=139° 50' 47" E.

Height=3 m

June, July 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
30	h m 19 10.2	° ' 7 24.0
	12.2	23.9
	20 12.0	24.0
	14.6	23.9
	21 06.8	24.6
	10.9	24.6
	22 04.7	24.6
	07.4	24.6
	57.1	22.1
	59.7	22.2
	1 0 14.5	22.0
		22.0
		22.0
		22.0
		21.3
		21.8
		21.7
		21.7
		21.7
		20.6
		20.5
		19.6
		19.5
		17.8
1	02.1	17.8
	59.1	19.2
	8 01.8	19.2
	9 02.8	20.4
	05.6	20.4
	10 01.6	21.5
	04.6	21.5
	11 01.3	23.8
	05.4	23.8
	12 00.1	26.1
	02.3	26.4
	13 04.7	27.2
	07.6	27.2
	14 00.3	26.9
	03.4	27.1
	15 01.3	27.6
	04.1	27.4
	16 02.2	26.0
	04.4	26.0
	57.7	24.6
17	00.5	24.7
	59.7	24.6
	18 02.4	24.6
	19 05.4	23.8
19	08.1	23.9
	20 00.4	23.9
20	02.8	23.9
		23.9

Date	Time	H
30	h m	r
	19 25.8	29246
	32.7	44
	20 42.2	46
	47.7	48
	21 17.2	47
	21.6	49
	22 15.2	56
	19.7	52
	23 12.0	42
1	17.0	42
	0 24.7	48
	28.6	48
	1 22.3	48
	26.5	46
	2 12.4	46
	16.0	47
	3 11.0	46
	14.4	46
	4 13.0	49
	16.8	50
	5 11.7	53
	15.8	53
	6 13.5	39
	16.9	39
	7 09.9	31
	13.5	29
	8 10.4	15
	15.4	17
	9 19.6	21
	24.7	21
	10 18.1	23
	21.5	24
	11 13.9	28
	17.9	27
	12 07.5	35
	12.0	39
	13 13.4	40
	16.3	40
	14 10.4	30
	13.0	29
	15 15.1	01
	19.0	07
	16 12.1	05
	14.9	08
	17 09.0	21
	12.3	21
	18 10.5	21
	13.8	21
	19 14.1	25
20.2	26	
20 08.5	27	
10.8	29	

Date	Time	θ
30	h m 23 34.2	° ' 52 30.4
	38.2	30.4
1	5 27.9	30.6
	30.3	30.7
	11 29.3	32.1
	32.3	31.6
	17 22.9	31.7
	26.1	31.4

No. 33. Onagawa (女 川)

Lat.=38° 26' 40" N., Long.=141° 27' 00" E.

Height=31 m

June 1954

Inst. No. 29 Coil 21C Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
21	14 18.4	6 52.6
	21.8	52.5
	15 07.1	52.7
	09.7	52.6
	16 00.1	52.6
	03.3	52.5
	59.9	51.8
	17 02.4	51.8
	18 17.0	51.3
	18.8	51.4
	19 00.0	51.3
	02.4	51.3
	20 00.0	51.3
	03.3	51.2
	21 00.3	51.3
	02.8	51.3
	22 00.3	51.1
	02.6	51.1
	23 00.3	50.8
	02.5	50.9
22	0 00.3	50.1
	02.5	50.1
	1 00.1	49.3
	02.6	49.4
	2 00.1	47.9
	02.6	48.3
	3 00.1	49.1
	03.3	49.1
	59.0	49.2
	4 01.7	49.1
	5 00.3	48.9
	04.3	48.9
	6 14.6	47.6
	16.8	47.5
	58.4	47.9
	7 01.0	47.9
	8 01.9	48.2
	04.4	48.2
	9 01.1	48.5
	02.9	48.4
	59.6	50.8
	10 02.9	50.9
	11 00.9	52.8
	03.4	52.8
	12 01.9	53.5
	04.6	53.4
	13 00.3	53.9
	02.7	53.9
	14 03.5	53.7
	25.5	53.7
	15 03.9	51.9
	06.8	51.9
	16 13.8	52.8
	15.2	52.9

Date	Time	H
	h m	r
21	15 27.6	29141
	35.1	43
	16 17.5	44
	22.7	43
	17 21.7	43
	27.8	40
	18 30.6	43
	35.2	44
	19 20.6	47
	26.9	47
	20 18.8	45
	25.4	43
	21 23.1	47
	28.6	45
	22 15.8	43
	22.8	45
	23 22.9	40
	27.6	41
22	0 18.8	47
	24.4	47
	1 24.1	40
	30.9	42
	2 20.1	42
	27.3	43
	3 20.4	43
	27.6	47
	34.4	46
	4 22.4	45
	27.1	45
	5 25.5	50
	31.4	50
	6 25.2	45
	29.4	44
	7 22.5	37
	26.9	35
	8 25.4	12
	28.9	12
	9 25.0	11
	29.5	10
	10 18.5	16
	24.8	17
	11 14.3	24
	19.2	23
	12 28.1	22
	32.1	23
	13 22.9	21
	27.1	20
	14 22.6	26
	26.7	27
	15 25.4	28
	29.4	28
	16 45.7	22
	49.5	23

Date	Time	θ
	h m	° '
21	17 58.2	51 44.1
	18 03.1	44.4
22	5 54.2	43.0
	59.7	43.4
	11 32.3	43.9
	35.3	43.9

No. 34. Sendai (仙 台)

Lat.=38° 14' 30" N., Long.=140° 51' 36" E.

Height=100 m

June 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	^h ^m	[°] [']
17	18 18.1	7 27.8
	20.9	27.8
	59.9	28.0
	19 02.0	28.2
	20 01.9	28.5
	05.1	28.3
	21 02.0	28.2
	05.4	28.2
	22 03.8	28.3
	05.9	28.3
	23 02.5	28.0
	04.6	28.0
	18 0 01.8	27.7
	04.1	27.8
18	1 04.1	27.4
	06.2	27.4
	2 04.3	27.3
	06.8	27.3
	3 01.6	27.1
	05.1	27.1
	4 23.2	26.7
	27.2	26.8
	5 04.6	26.3
	14.3	26.4
	58.1	25.8
	6 04.1	25.6
	7 40.8	23.3
	45.0	22.9
	8 31.2	24.2
	34.5	24.2
	9 00.0	24.0
	02.7	24.0
	10 00.0	26.3
	04.7	26.5
	10.2	27.1
	11 01.8	28.6
	04.5	28.6
	59.9	29.9
	12 02.5	30.0
	13 02.1	31.3
	04.9	31.3
	14 06.5	31.6
	08.1	31.6
	15 08.9	30.0
	11.0	30.0
	16 01.5	29.2
	04.0	29.2
	59.8	28.0
	17 01.4	28.0
	18 01.4	28.0
	03.2	28.0

Date	Time	H
	^h ^m	^r
17	18 33.5	29189
	39.3	90
	19 27.9	90
	34.9	91
	20 20.4	92
	27.6	90
	21 17.7	92
	23.7	92
	22 16.9	88
	23.7	87
	23 18.1	90
	23.5	90
	18 0 16.4	91
	22.8	91
18	1 17.8	91
	23.7	90
	2 17.2	91
	21.3	91
	3 19.7	91
	24.7	91
	4 48.0	92
	52.1	94
	5 25.7	93
	29.7	92
	6 21.7	80
	28.0	76
	7 58.6	65
	8 08.0	66
	9 17.5	68
	24.8	69
	10 27.5	76
	33.1	77
	11 14.2	83
	18.3	82
	12 11.0	91
	14.6	92
	13 47.2	98
	51.1	97
	14 22.4	95
	28.2	96
	15 26.3	94
	33.0	94
	16 15.6	87
	19.8	88
	17 14.8	82
	20.1	84
	18 11.8	78
	15.4	79

Date	Time	θ
	^h ^m	[°] [']
18	7 12.5	51 50.3
	16.9	50.0
	11 32.6	49.9
	36.8	49.2
	18 34.1	49.3
	40.0	49.6

No. 35. Murakami (村上)

Lat.=38° 13' 05" N., Long.=139° 28' 59" E.

Height=15 m

June 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	^h ^m	[°] [']
27	9 20.0	7 13.8
	23.4	14.0
	10 08.2	14.7
	10.6	14.8
	11 04.4	15.6
	06.8	15.7
	12 02.9	16.5
	05.6	16.4
	13 01.5	17.4
	03.9	17.5
	14 02.4	17.7
	04.8	17.8
	15 02.2	17.5
	04.2	17.5
	16 00.4	16.7
	03.7	16.7
	59.5	15.5
	17 02.7	15.5
	18 04.3	15.1
	06.7	15.2
	19 00.0	14.9
	02.8	14.8
	56.6	14.8
	59.4	14.7
	21 03.3	14.4
	05.5	14.5
	22 02.7	14.1
	05.1	14.1
	23 03.1	14.0
	06.4	14.0
28	0 30.1	13.7
	33.1	13.7
	1 02.7	13.5
	05.3	13.6
	2 01.8	13.5
	04.6	13.5
	3 01.2	13.1
	03.8	13.2
	4 02.1	12.9
	04.7	12.9
	5 00.5	11.4
	03.3	11.1
	6 02.2	10.4
	04.5	10.3
	57.1	10.6
	59.7	10.6
	8 04.4	12.4
	06.8	12.5
	9 00.2	13.8
	02.5	13.7
	59.5	14.4
	10 02.1	14.4
	11 02.6	15.5
	04.9	15.4

Date	Time	H
	^h ^m	^r
27	9 31.3	29530
	34.4	29
	10 19.0	30
	23.2	30
	11 13.5	37
	16.4	37
	12 15.4	39
	20.8	38
	13 10.2	40
	13.4	40
	14 12.9	31
	16.3	31
	15 12.2	34
	15.6	32
	16 10.2	31
	14.2	34
	17 12.4	35
	16.5	35
	18 23.6	37
	27.0	37
	19 13.4	38
	15.1	39
	20 06.0	42
	08.8	42
	21 12.8	46
	15.7	47
	22 12.3	44
	15.9	45
	23 17.6	53
	23.5	54
28	0 41.1	47
	44.4	47
	1 11.5	45
	14.5	45
	2 11.6	44
	14.7	43
	3 10.8	41
	15.2	42
	4 10.1	41
	13.3	43
	5 19.6	54
	22.9	54
	6 15.0	54
	20.5	56
	7 06.8	57
	10.8	54
	8 22.0	51
	25.5	51
	9 08.6	49
	12.7	49
	10 08.4	38
	12.2	39
	11 10.8	34
	14.1	35

Date	Time	θ
	^h ^m	[°] [']
27	11 27.6	51 40.9
	30.5	40.3
	17 24.5	40.2
	26.7	40.7
	23 37.1	39.2
28	41.3	38.9
	5 32.4	39.9
	37.0	39.8

No. 36. Ryōtu (両 津)

Lat.=38° 05' 04" N., Long.=138° 25' 42" E.

Height=15 m

June 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
18	^h 6 ^m 00.4	[°] 7 ['] 16.8
	03.4	16.8
	7 22.5	15.7
	27.3	15.2
	59.5	14.9
	8 02.7	14.8
	9 09.3	15.9
	12.3	16.2
	10 03.3	18.0
	06.3	18.2
	11 01.3	20.2
	07.0	20.5
	12 27.5	22.7
	29.8	22.6
	13 17.3	23.0
	20.9	23.1
	14 09.0	23.7
	11.6	24.1
	15 03.0	23.4
	05.1	23.3
	58.3	22.3
	16 00.9	22.2
	17 01.9	20.6
	04.6	20.8
	18 00.1	20.8
	02.4	20.8
	58.4	20.7
	19 01.5	20.7
	20 01.5	20.8
	04.2	20.8
	21 01.8	20.6
	04.9	20.6
	22 03.5	20.6
	06.3	20.6
	23 01.6	20.5
	04.5	20.2
19	0 00.0	20.2
	03.3	20.3
	1 02.2	19.9
	05.3	20.0
	2 01.5	19.4
	06.5	19.3
	58.7	18.8
	3 02.1	18.8
	57.7	17.6
	4 00.3	17.8
	5 03.6	17.3
	07.1	17.3
	59.0	16.8
	6 01.7	16.8
	59.7	14.9
	7 02.6	15.8
	8 16.7	16.3
	19.7	16.6

Date	Time	H
18	^h 6 ^m 24.1	[°] 29651
	40.8	49
	7 46.5	33
	50.3	33
	8 17.7	33
	21.8	33
	9 27.0	43
	32.3	42
	10 34.1	46
	38.4	46
	11 19.6	54
	28.4	58
	12 54.9	62
	13 03.8	61
	33.3	64
	39.6	67
	14 40.1	65
	44.6	65
	15 19.1	61
	22.7	61
	16 09.2	59
	13.7	55
	17 16.9	48
	21.9	46
	18 13.7	43
	18.2	45
	19 10.6	48
	18.1	48
	20 15.1	44
	19.4	44
	21 14.1	49
	19.9	51
	22 20.0	50
	27.8	49
	23 14.9	50
	19.5	51
19	0 12.8	50
	17.4	52
	1 14.6	53
	19.2	54
	2 19.7	52
	25.4	50
	3 11.3	66
	16.2	66
	4 08.4	58
	13.4	59
	5 22.0	50
	26.5	52
	6 10.9	48
	15.5	46
	7 09.5	55
	13.4	54
	8 29.0	25
	31.8	24

Date	Time	θ
18	^h 6 ^m 53.8	[°] 51 ['] 42.5
	59.0	42.6
	11 48.5	45.6
	57.3	39.3
	18 32.2	43.9
	34.5	42.7

No. 37. Aikawa (相 川)

Lat.=38° 02' 10" N., Long.=138° 14' 37" E.

Height=20 m

June 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
20	14 02.7	7 26.4
	05.0	26.5
	15 01.1	26.2
	03.5	26.2
	16 00.5	24.5
	02.8	24.4
	17 03.6	23.6
	05.8	23.7
	18 04.5	23.0
	08.8	22.9
	19 06.2	22.6
	09.9	22.7
	20 00.3	23.0
	03.1	23.0
	58.2	23.1
	21 04.3	23.2
	59.4	23.1
	22 02.2	23.0
	23 03.7	22.8
	06.7	22.7
21	0 04.1	23.3
	08.0	23.1
	1 01.7	22.9
	04.4	22.9
	2 02.2	22.4
	04.6	22.5
	3 02.3	22.0
	05.4	21.9
	4 01.3	22.0
	03.8	22.0
	5 03.0	21.1
	06.2	20.9
	6 09.4	20.2
	12.0	20.2
	7 00.2	20.2
	03.4	20.3
	8 01.7	19.6
	03.9	19.7
	59.8	20.2
	9 02.4	20.2
10	01.1	21.0
	03.4	21.1
	56.0	22.8
	58.5	22.8
	12 04.7	24.1
	07.0	24.1
	13 00.3	24.1
	02.9	24.1
	14 00.8	24.7
	03.4	24.8
15	57.5	25.3
	00.0	25.3

Date	Time	H
	h m	r
20	14 16.1	29468
	22.5	68
	15 11.6	67
	15.9	68
	16 09.2	65
	12.4	65
	17 14.3	65
	18.2	66
	18 19.5	60
	23.9	59
	19 22.1	57
	25.3	57
	20 14.4	56
	18.0	56
	21 25.2	63
	29.4	64
	22 11.3	64
	14.7	66
	23 23.3	59
	31.9	62
21	0 15.4	60
	19.5	60
	1 11.6	59
	15.2	56
	2 10.9	58
	14.3	58
	3 24.3	58
	28.9	59
	4 18.0	60
	21.7	60
	5 15.8	60
	19.6	59
	6 27.2	58
	32.1	58
	7 14.9	53
	19.9	52
	8 11.9	45
	16.8	42
	9 09.7	38
	13.8	39
10	11.2	48
	15.5	46
	11 07.4	54
	11.1	54
	12 14.1	56
	17.9	55
	13 09.8	54
	13.5	54
	14 10.2	59
	14.0	59
15	07.1	61
	11.0	61

Date	Time	θ
	h m	° '
20	18 37.6	51 48.9
	41.9	48.3
21	5 33.4	50.6
	37.9	49.4
	11 21.4	49.8
	25.2	50.0

No. 38. Niigata (新潟)

Lat.=37° 55' 07" N., Long.=139° 02' 18" E.

Height=5 m

June 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
24	^h ^m	[°] [']
	15 15.3	7 21.2
	18.4	21.2
	58.8	20.2
	16 01.6	20.2
	59.7	19.7
	17 02.7	19.6
	18 00.0	18.7
	03.3	18.4
	57.0	18.5
	59.7	18.2
	19 56.8	18.6
	20 00.2	18.7
	21 02.7	18.1
	04.6	18.3
	22 00.3	18.1
	03.3	18.2
	23 06.5	18.3
	09.4	18.3
	25 0 03.8	18.0
	06.2	18.1
	59.3	17.6
	1 01.2	17.6
	58.6	17.2
	2 00.9	17.1
	58.3	17.1
25	3 01.5	17.2
	58.7	16.8
	4 01.7	16.8
	58.5	15.9
	5 00.8	16.0
	6 12.9	15.1
	15.4	15.4
	7 00.3	15.1
	03.3	14.9
	8 01.9	15.9
	04.0	15.7
	9 02.9	15.9
	05.1	16.0
	10 03.0	17.9
	05.8	18.1
	58.6	18.2
	11 01.2	18.4
	12 04.4	19.2
	08.0	19.1
	13 01.3	20.0
	03.9	20.1
	59.8	20.7
	14 03.0	21.0
	58.2	19.9
	15 01.0	19.8
	16 00.1	19.0
	03.3	19.2
	17 05.3	18.2
	08.7	18.3

Date	Time	H
24	^h ^m	^r
	15 28.0	29526
	31.6	27
	16 13.4	20
	18.1	18
	17 09.8	14
	13.1	13
	18 14.0	13
	20.3	13
	19 11.4	13
	16.5	11
	20 11.5	13
	15.9	15
	21 13.5	13
	18.2	14
	22 13.1	16
	17.4	18
	23 21.7	18
	25.9	18
	25 0 14.8	17
	21.9	17
	1 18.1	20
	12.7	18
	2 09.0	18
	13.8	13
25	3 11.7	17
	18.3	15
	4 12.9	16
	19.4	16
	5 12.4	18
	20.1	18
	6 26.7	13
	31.4	18
	7 13.7	17
	18.8	16
	8 13.1	11
	18.6	12
	9 21.3	00
	25.5	01
	10 12.1	03
	15.8	06
	11 07.7	10
	10.7	12
	12 14.9	14
	18.7	15
	13 11.6	18
	15.1	19
	14 09.2	17
	12.2	16
	15 08.7	24
	12.0	22
	16 10.1	22
	14.0	22
	17 14.8	16
	17.7	15

Date	Time	θ
24	^h ^m	[°] [']
	17 26.8	51 37.3
	29.7	37.4
25	23 37.4	36.3
	41.4	36.3
	5 34.8	37.0
	40.0	36.9
	11 22.4	37.0
	25.5	36.8

No. 39. Wazima (輪 島) 1

Lat.=37° 23' 35" N., Long.=136° 53' 55" E.

Height=8 m

Aug. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ	
	h m	°	'
8	16 42.4	7	8.4
	44.8		8.4
	59.6		8.2
	17 02.2		8.2
	58.6		7.8
	18 02.1		7.9
	19 03.6		6.4
	06.0		6.4
	20 03.2		7.7
	05.5		7.7
	21 06.3		7.9
	08.7		7.9
	22 02.0		7.8
	05.8		7.8
9	59.4		7.7
	23 01.8		7.7
	0 00.1		8.0
	02.5		8.2
	1 04.9		8.2
	07.2		8.1
	2 02.5		8.0
	05.5		7.9
	58.1		7.7
	3 01.4		7.8
	58.2		7.6
	4 01.4		7.6
	58.4		6.6
	5 01.4		6.6
	6 31.3		5.7
	33.8		5.7
	58.7		5.5
	7 01.5		5.7
	8 00.4		6.1
	03.4		6.2
	59.7		7.0
	9 02.7		7.1
	57.0		8.5
	10 00.3		8.7
	57.7		10.4
	11 01.6		10.5
	56.8		10.8
	59.6		10.8
	12 59.6		11.3
	13 02.4		11.3
	59.5		10.8
	14 02.2		10.7
	15 00.4		9.4
	03.2		9.2
	16 00.2		8.2
	02.2		8.2
	59.6		7.4
	17 02.9		7.4

Date	Time	H
	h m	r
8	17 10.4	30035
	14.4	34
	18 09.8	29
	14.5	28
	19 14.2	21
	18.6	23
	20 19.0	24
	22.0	25
	21 19.4	30
	25.8	31
	22 14.3	29
	17.3	28
	23 13.5	32
	16.5	32
9	0 09.8	35
	12.5	34
	1 13.1	36
	16.4	38
	2 14.0	41
	19.5	42
	3 10.7	42
	14.8	41
	19.1	39
	4 11.6	34
	15.4	34
	5 09.6	35
	14.1	36
	6 40.3	30
	45.3	32
	7 08.8	30
	12.8	29
	8 10.5	14
	14.3	12
	9 10.3	06
	14.2	06
	10 07.8	17
	11.6	19
	11 08.9	35
	12.2	34
	12 07.5	41
	13.3	41
	13 08.5	39
	12.3	39
	14 10.2	48
	14.6	48
	15 10.3	49
	15.0	48
	16 09.2	39
	12.5	39
	17 10.8	34
	16.4	31

Date	Time	θ	
	h m	°	'
8	17 23.6	51	12.1
	28.2		12.1
	23 27.2		12.3
9	31.1		12.4
	5 45.1		11.9
	55.9		12.2
	6 13.7		11.7
	11 26.9		11.4
	33.8		11.5

No. 40. Wazima (輪 島) 2

Lat.=37° 23' 23" N., Long.=136° 53' 55" E.

Height=6 m

Aug. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time		δ
6	h	m	° ' "
	18	42.3	6 49.6
		45.4	49.8
		56.1	49.7
	19	01.3	49.6
	20	01.4	49.0
		04.2	48.9
	21	54.1	47.4
		56.5	47.6
	23	04.4	48.3
7		06.7	48.4
	0	09.4	47.8
		12.7	47.8
		59.4	47.5
	1	02.0	47.4
	2	02.6	48.7
		04.4	48.7
		56.3	48.0
		58.9	48.2
	3	57.7	47.3
	4	00.7	47.2
		59.3	47.4
	5	03.0	47.2
	6	06.4	46.9
		08.6	46.9
		57.3	47.3
	7	00.0	47.3
	8	00.4	47.9
		08.4	47.9
		59.1	49.3
	9	01.2	49.3
		59.7	50.7
	10	03.5	50.8
	11	02.5	53.7
		06.2	53.6
	12	30.2	54.9
		32.4	54.9
		59.0	55.3
	13	01.9	55.3
		57.8	55.4
	59.8	55.3	
15	00.5	54.7	
	02.7	54.6	
16	00.8	52.6	
	03.5	52.6	
	58.7	49.6	
17	01.8	49.5	
18	14.2	49.7	
	17.5	49.7	
19	02.2	49.8	
	05.8	49.8	
20	00.1	49.8	
	03.7	49.8	
21	00.1	48.7	
	03.9	48.6	

Date	Time		H
6	h	m	r
	19	11.4	30075
		17.0	75
	20	19.0	86
		26.2	89
	22	21.9	113
		24.8	15
	23	14.3	06
		18.1	04
	7	0	21.1
		24.4	16
1		10.1	18
		14.3	18
2		12.2	11
		20.3	18
3		09.5	19
		14.8	18
4		09.7	18
		14.1	18
5		11.5	06
		16.1	04
6		15.6	04
		20.0	04
7		07.8	00
		12.2	097
8		12.9	92
		17.1	92
9		08.2	91
		13.4	92
10		11.3	88
		16.0	88
11		15.9	88
		20.3	93
12		39.9	107
		42.4	04
13		16.5	13
		19.4	13
14		06.9	15
		10.6	14
15	15.1	04	
	20.0	02	
16	11.3	10	
	15.1	09	
17	09.9	11	
	13.5	11	
18	24.0	22	
	27.1	20	
19	14.2	22	
	17.9	20	
20	11.0	03	
	15.4	097	
21	15.4	120	
	20.2	09	

Date	Time		θ
6	h	m	° ' "
	23	40.3	51 2.0
7		45.8	1.8
	5	42.0	0.6
		47.2	0.7
	11	45.7	1.1
		51.1	1.2
	17	33.7	1.2
	36.8	1.1	

No. 41. Tōkamati (十日町)

Lat.=37° 07' 47" N., Long.=138° 46' 04" E.

Height=170 m

July 1955

Inst. No. 21A Coil 21B Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
24	8 06.9	6 43.6
	09.8	43.5
	59.8	45.7
	9 02.9	45.8
	10 12.2	46.5
	14.6	46.5
	11 16.6	48.1
	21.6	48.2
	12 28.3	48.9
	33.4	48.6
	13 07.7	50.7
	13.1	50.2
	59.2	51.1
	14 02.6	50.9
	15 01.5	50.6
	04.4	50.6
	16 04.9	50.4
	11.5	50.1
	17 07.0	48.2
	11.5	48.2
	19 14.7	46.5
	18.5	46.8
	20 00.4	46.5
	04.8	46.5
	21 01.4	47.1
	04.9	47.1
	58.9	47.1
	22 01.9	47.0
	23 00.2	46.4
	03.5	46.6
25	0 07.1	46.3
	10.6	46.3
	1 00.0	46.1
	03.8	46.0
	58.7	45.7
	2 02.3	45.7
	3 01.7	45.2
	06.2	45.4
	57.7	45.1
	4 02.2	44.9
	5 01.2	45.0
	04.3	44.7
	8 03.9	42.2
	05.9	42.2
	58.7	43.2
	9 00.7	43.5
	59.8	44.8
	10 02.2	44.8
	11 00.2	47.9
	02.2	48.1
	58.8	49.5
	12 00.5	49.7

Date	Time	H
	h m	r
24	9 45.3	29957
	50.0	59
	10 59.6	78
	11 07.1	79
	33.2	76
	40.0	79
	12 52.6	88
	58.0	85
	13 26.1	73
	31.2	72
	14 11.4	77
	16.2	76
	15 13.8	30007
	18.4	10
	16 36.9	29975
	41.7	75
	17 30.8	67
	36.2	67
	19 41.0	62
	47.1	65
	20 15.1	75
	19.9	74
	21 16.0	67
	21.2	67
	22 09.1	70
	13.6	71
25	23 16.5	70
	20.9	67
	0 24.5	67
	28.8	65
	1 15.7	63
	21.6	63
	2 13.5	62
	22.7	63
	3 17.0	64
	22.8	63
	4 13.2	67
	20.2	69
	5 32.2	71
	36.0	73
	6 56.2	68
	59.9	69
	7 25.1	63
	28.9	64
	8 19.8	55
	24.3	54
	9 07.8	50
	12.8	50
	10 19.3	48
	11.3	50
	16.0	52
	11 14.2	48
	18.8	46
	12 07.5	56
	11.3	56

Date	Time	θ
	h m	° '
24	11 58.2	50 48.6
	12 03.7	48.4
	18 02.3	49.2
	12.5	49.0
	23 39.9	44.4
25	45.9	44.2
	5 52.0	50.4
	6 09.6	50.1

No. 42. Itoigawa (糸魚川)

Lat.=37° 02' 12" N., Long.=137° 51' 58" E.

Height=10 m

July 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
27	^h 16 ^m 49.7	[°] 6 ['] 54.5
	52.7	54.3
	17 59.2	53.5
	18 01.1	53.5
	58.8	53.3
	19 01.8	53.4
	57.8	53.4
	20 00.8	53.4
	21 00.1	53.3
	03.6	53.3
	58.6	52.3
	22 01.9	52.7
	23 20.4	52.6
	22.3	52.5
	59.6	52.9
	28 0 03.1	52.8
	1 05.2	52.4
	07.9	52.5
	2 05.1	51.8
	08.0	51.8
	3 03.8	51.6
	06.2	51.6
	58.7	51.4
28	4 01.3	51.4
	5 03.3	51.1
	06.2	51.1
	58.5	50.5
	6 01.4	50.6
	7 07.6	50.2
	10.0	50.2
	54.3	50.3
	57.3	50.3
	8 59.9	50.7
	9 03.5	50.0
	10 04.0	53.7
	08.4	53.7
	11 00.7	55.7
	03.6	55.9
	57.3	57.2
	59.4	57.2
	12 57.2	59.0
	59.1	59.0
	14 01.5	58.9
	03.3	58.9
	57.4	57.0
	59.6	56.9
	15 58.1	55.4
	16 00.8	55.4
	57.2	54.2
	17 00.2	54.3

Date	Time	H
27	^h 17 ^m 12.8	^r 29931
	16.6	30
	18 08.5	30
	13.7	31
	19 11.9	36
	17.1	36
	20 14.9	39
	20.8	39
	21 11.9	43
	16.5	43
	22 14.8	39
	20.8	39
	23 38.8	36
	44.1	35
	28 0 19.0	29
	22.7	29
	1 18.6	33
	23.3	32
	2 15.7	28
	22.4	29
	3 09.9	30
	21.3	31
	4 11.1	26
	15.6	25
	5 14.8	22
	19.4	21
	6 11.6	20
	16.9	18
	7 19.5	09
	26.4	09
	8 03.8	12
	07.8	10
	9 21.4	14
	35.6	17
	40.1	16
	10 18.3	23
	23.8	24
	11 10.6	25
	14.4	25
	12 06.8	31
	11.2	32
	13 06.2	34
	09.4	34
	14 09.7	45
	13.4	46
	15 06.7	48
	12.6	48
	16 17.6	43
	25.1	43

Date	Time	θ
27	^h 17 ^m 29.9	[°] 50 ['] 43.0
	33.4	43.1
28	1 46.0	43.1
	50.7	43.0
	6 31.1	44.2
	40.9	44.1
	11 27.9	41.9
	33.6	42.3
	38.8	42.3

No. 43. Kuroiso (黒磯)

Lat.=36° 57' 56" N., Long.=140° 03' 23" E.

Height=300 m

Aug. 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time		δ	
	h	m	°	'
23	21	59.1	7	1.4
	22	01.3		1.4
	23	00.4		1.4
24		02.0		1.4
	0	02.3		1.0
		04.7		1.0
		58.0		0.9
	1	00.8		0.9
		58.2		0.6
	2	00.7		0.8
		58.9	6	59.4
	3	01.2		59.4
		58.3		59.4
	4	00.7		59.4
	5	01.4		59.7
		03.8	7	0.6
		58.0	6	58.9
	6	00.7		58.8
		58.4		58.8
	7	00.5		58.8
		58.8		59.5
	8	00.6		59.5
		58.1		59.3
	9	00.2		59.3
		58.2	7	1.7
	10	00.0		1.7
		58.2		3.5
	11	01.4		3.5
		59.8		4.1
	12	01.4		4.1
		58.2		4.0
	13	00.0		4.9
		58.3		4.6
	14	00.3		4.7
		58.0		3.4
		59.6		3.4
	15	59.2		1.3
	16	01.7		1.2
		55.6		1.5
		57.7		1.5
	17	53.1		1.3
		55.2		1.3
	19	04.8		1.1
		07.0		1.1
	20	01.8		1.2
		05.1		1.3
	21	02.0	6	59.7
		04.0		59.7
	22	02.4	7	1.0
		04.6		1.1

Date	Time		H
	h	m	r
23	22	16.8	29914
		20.6	14
24	23	13.6	30
		18.6	31
	0	21.5	19
		25.1	21
		39.7	21
	1	10.9	22
		16.2	23
	2	17.2	21
		20.9	21
	3	15.1	21
		20.5	21
	4	14.3	21
		18.8	18
		25.4	16
	5	15.6	26
		20.2	26
	6	08.2	26
		12.0	27
	7	11.4	23
		15.8	21
	8	9.7	13
		13.1	13
	9	10.2	27
		14.2	27
	10	07.0	23
		12.1	23
	11	13.6	27
		16.8	28
	12	10.8	23
		14.1	21
		17.7	21
	13	10.0	23
		14.6	25
	14	13.3	38
		17.1	38
	15	09.0	27
		12.3	28
	16	12.5	12
		16.1	12
	17	07.4	12
		11.4	12
	18	04.4	22
		08.2	24
		12.3	24
	19	15.5	23
		19.5	22
	20	15.1	26
		19.2	23
		22.8	23
	21	12.5	27
		16.6	27
	22	19.9	28
		23.1	28

Date	Time		θ	
	h	m	°	'
23	23	37.2	50	18.2
		41.3		18.1
24	5	40.1		18.9
		44.5		18.9
	11	28.9		16.1
		31.5		16.1
	17	30.3		18.8
		32.9		18.8

No. 44. Ueda (植 田)

Lat.=36° 53' 51" N., Long.=140° 48' 37" E.

Height=2 m

Aug. 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
30	h m 12 05.7	° ' 6 32.7
	07.9	32.6
	59.6	31.6
	13 00.6	31.6
	14 02.8	31.0
	04.3	31.0
	15 01.1	30.5
	03.2	30.5
	16 01.1	29.3
	02.6	29.3
	56.1	27.7
	57.5	27.7
	17 58.0	26.7
	59.3	26.7
	18 56.8	27.7
	59.7	27.7
	19 58.4	27.4
	20 00.7	27.4
	57.9	27.4
	21 00.3	27.4
	22 01.4	28.0
	03.7	27.9
	58.6	27.8
	23 00.2	27.7
	58.7	27.4
31	0 00.8	27.4
	1 10.4	27.0
	12.7	27.0
	58.3	27.0
	2 00.1	27.0
	58.8	26.6
	3 00.5	26.6
	58.1	26.8
	59.6	26.8
	5 20.3	26.4
	21.5	26.4
	59.3	26.4
	6 01.4	26.4
	58.4	26.0
	59.9	26.0
	7 56.5	25.7
	58.4	25.6
	8 59.2	26.6
	9 00.7	26.6
	59.0	29.0
	10 00.3	29.0
	11 03.6	30.8
	05.1	30.8
	57.8	31.6
	59.2	31.6

Date	Time	H
30	h m 12 25.2	r 29753
	29.8	52
	13 13.0	54
	17.1	56
	21.0	54
	14 13.5	58
	16.8	57
	15 12.8	49
	17.1	48
	16 13.4	44
	18.3	43
	17 08.2	37
	12.6	37
	18 08.4	39
	12.5	39
	19 12.2	41
	16.7	41
	20 14.4	38
	18.2	37
	21 09.3	42
	14.0	42
	22 14.9	54
	19.4	54
	23 08.5	46
	13.1	46
31	0 08.0	48
	12.4	47
	1 25.5	45
	29.4	45
	2 10.8	43
	15.8	43
	3 13.1	44
	17.2	45
	4 10.0	46
	13.5	46
	5 31.2	48
	35.7	50
	6 11.8	45
	15.6	45
	7 11.5	32
	15.1	31
	8 07.5	21
	10.7	21
	9 09.4	12
	12.7	12
	10 09.2	15
	12.5	16
	11 15.8	39
	18.9	40
	12 07.1	52
	10.6	52

Date	Time	θ
30	h m 17 32.1	° ' 50 14.1
	34.2	14.4
	23 27.1	13.1
31	30.1	13.4
	6 27.1	13.6
	30.2	13.6
	11 34.8	12.8
	37.1	12.7

No. 45. Toyama (富山)

Lat.=36° 41' 03" N., Long.=137° 04' 39" E.

Height=10 m

Aug. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time		δ	
	h	m	°	'
3	17	17.3	6	52.8
		19.5		52.7
	18	03.1		52.8
		05.7		52.8
		58.1		52.8
		59.7		52.7
	19	58.4		53.0
	20	01.2		53.0
		57.8		53.0
		59.4		53.1
4	22	01.1		53.4
		03.7		53.4
		59.8		53.2
	23	02.3		53.2
	0	02.9		53.2
		05.3		53.2
	1	21.4		52.6
		25.6		52.8
	2	00.6		52.9
		03.9		53.2
	3	07.0		52.8
		09.4		52.9
	4	00.5		52.6
		02.5		52.5
	5	00.9		51.5
		03.2		51.4
		59.2		49.5
	6	01.4		49.4
		56.8		49.2
		59.1		49.3
	8	00.2		49.4
		03.0		49.7
	9	01.0		52.4
		03.5		52.4
		57.7		54.7
	10	00.4		55.0
		58.5		56.4
	11	00.0		56.5
		58.8		55.8
	12	00.9		55.7
	13	02.9		57.2
		05.6		57.3
	14	02.6		57.8
		04.7		57.8
		59.6		55.7
	15	02.8		55.7
	16	05.0		54.8
		07.1		54.6
		55.1		53.8
		57.9		53.8
	18	00.1		53.2
		03.3		53.2
	19	01.6		53.0
		03.7		53.0

Date	Time		H
	h	m	r
3	17	27.5	30082
		31.0	83
	18	11.9	92
		15.2	93
	19	08.9	97
		16.4	97
	20	08.2	101
		12.4	00
	21	08.1	097
		12.3	97
4	22	12.5	101
		15.9	02
	23	08.6	094
		11.8	95
	0	15.1	93
		18.4	93
	1	37.7	95
		43.2	98
	2	13.0	105
		16.7	07
	3	19.2	097
		23.3	97
	4	16.0	99
		21.1	99
	5	10.5	97
		17.3	95
	6	09.0	95
		13.2	93
	7	07.6	84
		12.4	83
	8	09.5	74
		13.9	74
	9	09.8	73
		13.4	73
	10	08.1	86
		11.2	86
	11	06.9	115
		11.0	16
	12	08.5	33
		12.5	34
	13	13.7	10
		16.2	13
	14	11.4	086
		15.4	86
	15	09.9	99
		14.0	102
	16	13.9	11
		18.8	03
	17	05.4	086
		09.8	85
	18	09.9	83
		13.5	82
	19	08.8	49
		13.0	46

Date	Time		θ	
3	^h	^m	^o	[']
	17	43.4	50	27.7
		46.4		27.8
	23	34.5		30.7
		39.5		30.6
4	5	28.7		26.9
		33.2		27.0
	11	25.9		25.4
		34.9		25.3
	17	24.3		27.8
	28.1		28.1	

No. 46. Matuida (松井田)

Lat.=36° 19' 00" N., Long.=138° 47' 30" E.

Height=325 m

Sept. 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
18	h m 12 06.5	° ' 6 44.0
	08.2	44.0
	58.4	44.6
	13 00.2	44.6
	58.6	43.2
	14 00.2	43.2
	15 05.7	42.6
	07.6	42.6
	16 00.7	41.7
	02.4	41.7
	17 00.2	41.0
	02.2	40.9
	57.9	41.3
	59.7	41.3
	18 59.4	40.1
	19 00.8	40.1
	59.1	39.6
	20 01.0	39.5
	56.9	40.9
	58.8	40.9
	21 57.9	41.1
	22 00.5	41.1
	58.7	41.1
	23 00.7	41.1
19	0 00.1	41.0
	02.3	40.9
	1 00.4	40.4
	02.1	40.3
	59.4	39.9
	2 01.1	39.9
	58.1	40.4
	3 01.4	40.5
	57.9	40.2
	59.5	40.3
	4 59.0	38.9
	5 00.8	39.9
	6 03.1	39.0
	7 08.3	39.0
	10.3	39.0
	8 03.7	39.0
	05.5	39.0
	59.4	40.4
	9 01.5	40.5
	10 02.6	42.8
	04.8	42.7
	57.4	44.6
	59.3	44.2
	11 01.3	44.2
	12 04.6	44.9
	05.9	44.9

Date	Time	H
18	h m 12 15.8	° 30248
	18.8	49
	13 06.3	55
	09.1	55
	14 09.3	62
	14.2	63
	15 26.5	57
	29.1	59
	33.3	61
	16 11.4	57
	14.7	57
	17 09.0	36
	12.6	36
	18 09.0	40
	13.1	39
	19 09.5	48
	12.6	48
	20 08.0	36
	10.8	36
	21 07.3	39
	10.1	39
	22 07.3	48
	10.3	49
	23 07.7	49
19	10.9	50
	0 11.8	48
	14.9	49
	1 11.8	51
	14.8	51
	2 09.4	54
	12.6	54
	3 10.0	53
	12.9	54
	4 06.1	66
	09.1	65
	5 07.9	61
	12.0	62
	7 22.6	48
	26.4	47
	8 14.0	38
	18.4	37
	9 10.4	22
10	14.5	19
	17.4	18
	13.8	22
	17.5	25
	22.3	31
	11 09.3	28
	12.7	33
	12 12.9	45
	15.2	45

Date	Time	θ
18	h m 17 30.7	° ' 49 32.7
	33.5	32.7
	23 24.4	32.8
19	27.2	32.8
	5 32.5	30.1
	35.6	30.0
	11 30.4	32.2
	33.6	32.4

No. 47. Mito (水戸)

Lat.=36° 21' 09" N., Long.=140° 26' 44" E.

Height=35 m

Sept. 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	^h ^m	[°] [']
4	12 16.7	6 14.8
	19.7	14.8
	57.3	15.4
	13 00.5	15.2
	57.0	15.5
	59.5	15.5
	14 58.1	14.4
	15 00.3	14.4
	57.6	12.9
	59.1	12.9
	16 57.2	11.3
	59.6	11.3
	18 00.3	11.4
	02.3	11.3
	58.7	11.1
	19 00.5	11.1
	59.0	10.8
	20 00.5	10.8
	21 14.2	10.4
	16.6	10.5
	22 00.2	10.8
	03.0	10.8
	59.0	10.8
	23 01.1	10.8
	58.0	10.6
	59.7	10.6
5	1 00.1	9.6
	02.4	9.6
	57.2	10.3
	59.3	10.4
	2 58.1	10.4
	59.5	10.4
	3 59.3	10.3
	4 01.7	10.2
	58.9	10.2
	5 01.5	10.2
	6 04.3	9.4
	06.6	9.3
	57.9	9.2
	59.6	9.2
	7 57.2	9.8
	58.8	9.8
	8 59.4	10.8
	9 01.2	10.9
	59.4	14.2
	10 01.1	14.2
	11 01.5	15.6
	03.6	15.6
	55.0	15.8
	56.7	15.7
	12 12.5	15.8
	14.7	15.8

Date	Time	H
	^h ^m	^r
4	12 33.4	30048
	37.0	45
	13 11.4	46
	14.5	44
	14 17.9	34
	21.3	36
	15 11.1	32
	15.4	33
	16 08.9	43
	12.2	43
	17 13.4	42
	15.9	46
	20.0	43
	18 14.8	46
	18.5	46
	19 12.9	48
	17.7	48
	20 12.6	48
	16.1	48
	21 27.6	33
	30.5	33
	22 23.9	39
	28.0	37
	31.8	34
	35.6	33
	23 10.6	39
	15.6	42
	19.3	43
5	0 08.2	48
	11.9	48
	1 13.1	48
	17.5	48
	2 14.4	49
	17.2	48
	3 07.7	46
	11.1	46
	4 10.6	46
	14.7	48
	18.5	48
	5 11.2	50
	14.7	50
	6 18.2	44
	21.9	44
	7 08.7	37
	13.5	37
	8 07.6	33
	11.0	32
	9 21.1	23
	24.5	23
	10 09.7	24
	13.0	23
	11 13.6	34
	17.6	34
	12 05.3	43
	08.5	43

Date	Time	θ
	^h ^m	[°] [']
4	17 40.3	49 29.5
	46.1	29.3
	23 35.7	32.2
5	39.4	32.2
	5 38.2	31.0
	41.5	31.0
	11 40.7	29.7
	43.0	29.7

No. 48. Sioya (塩 屋)

Lat.=36° 17' 48" N., Long.=136° 15' 06" E.

Height=5 m

Aug. 1955

Inst. No. 21A Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ	Date	Time	H	Date	Time	θ
11	h m	° '	11	h m	γ	11	h m	° '
	19 07.8	6 45.3		19 19.8	30387		23 33.5	50 6.1
	09.7	45.2		23.5	88		39.1	6.4
	54.9	45.3		20 07.4	89		5 33.1	5.1
	58.0	45.3		10.9	89		40.7	5.5
	20 58.6	45.5		21 10.5	89		11 30.3	5.0
	21 01.7	45.4		14.8	88		36.1	5.0
	59.9	45.4		22 10.4	89		17 28.0	5.9
	22 02.6	45.4		15.1	89		30.9	5.8
	59.8	45.3		23 09.4	90			
	23 02.1	45.3		15.0	89			
	59.0	45.3		12 0 16.9	91			
	12 0 02.3	45.3		21.2	91			
	57.5	45.3		1 08.9	93			
	59.7	45.2		13.0	92			
	1 55.3	45.2		2 08.0	96			
	58.6	45.2		12.0	95			
	3 00.2	44.9		3 09.9	400			
	02.3	44.6		14.5	00			
12	56.2	45.0	12	4 05.7	05			
	58.2	45.3		10.5	05			
	5 01.0	43.8		5 14.5	10			
	05.5	43.9		18.1	09			
	6 20.4	42.8		6 34.5	03			
	22.6	42.8		38.4	03			
	7 04.1	42.9		7 19.2	393			
	11.3	43.0		23.4	92			
	8 01.3	43.3		8 11.9	88			
	03.4	43.3		16.3	86			
	9 03.3	43.9		9 15.6	80			
	06.3	43.9		19.7	80			
	57.5	45.2		10 04.2	88			
	58.3	45.3		07.4	88			
	10 58.3	46.5		11 05.9	98			
	11 00.3	46.5		07.4	400			
	57.5	46.9		12 08.3	07			
	12 00.2	47.0		12.3	07			
	57.1	47.8		13 05.6	09			
	59.9	47.8		09.6	09			
	13 56.1	47.9		14 04.5	14			
	57.9	48.0		08.1	14			
	14 56.0	47.0		15 06.4	21			
	58.3	46.6		10.0	20			
	15 58.4	45.5		16 07.3	15			
	59.1	45.6		11.8	16			
	16 55.6	45.3		17 15.8	03			
	57.5	45.3		19.4	05			
	17 58.9	44.9		18 12.2	398			
	18 00.8	45.1		14.2	98			
	55.8	45.1		19 04.3	400			
	58.5	45.3		06.9	01			
	19 58.1	45.1		20 06.5	03			
	20 00.6	45.4		10.3	03			

No. 49. Saigō (西 郷) 1

Lat.=36° 13' 18" N., Long.=133° 18' 35" E.

Height=20 m

Sept. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination			Horizontal Intensity			Dip						
Date	Time		δ	Date	Time		H	Date	Time		θ	
10	h	m	° ' ''	10	h	m	r	10	h	m	° ' ''	
	16	01.0	6 49.5		16	22.4	30580		17	30.8	50 25.8	
		03.6	49.4			26.3	78			36.9	25.4	
		57.9	48.3		17	07.0	85		23	28.4	25.6	
		59.3	48.4			10.0	84			33.1	25.7	
	17	58.4	48.0		18	11.2	87		11	5	33.3	25.6
	18	01.8	47.9			14.7	88				36.9	25.5
		57.7	46.8		19	06.0	87			11	26.7	25.6
		59.5	46.9			10.0	84				29.6	25.3
	19	57.1	47.3		20	07.4	80					
	20	00.9	47.3			11.7	81					
		58.3	47.3		21	08.1	82					
	21	00.8	47.2			12.9	84					
		57.5	47.1		22	08.7	88					
	22	01.2	47.1			13.2	88					
		58.6	47.1		23	09.4	89					
	23	02.0	47.1			14.7	89					
		59.6	47.0		11	0	11.9		91			
	11	0	03.0				16.8		92			
58.9		46.6	1	09.1		90						
1	01.8	46.6		13.8		91						
2	02.9	46.5	2	12.8		94						
	05.3	46.5		17.4		94						
	58.0	46.5	3	07.3		88						
3	00.3	46.6		11.8		89						
	58.0	46.8	4	09.4		91						
4	01.3	46.8		14.6		91						
	57.6	46.7	5	08.3		92						
5	00.2	46.7		12.6		93						
	57.6	46.4	6	10.8		93						
6	00.7	46.4		15.0		91						
7	06.4	45.9	7	17.5		88						
	09.9	45.8		21.1		89						
	56.9	45.3	8	06.4		90						
	59.3	45.3		10.0		89						
8	59.1	45.2	9	09.5		82						
9	01.5	45.2		13.0		83						
	59.8	46.2	10	22.1		75						
10	02.3	46.4		26.7		75						
	56.9	47.4	11	06.9		80						
	59.2	47.4		11.7		80						
11	58.1	49.0	12	08.5		77						
12	00.5	49.0		13.3		78						
	56.3	49.2	13	05.8		84						
	59.0	49.2		10.0		84						
14	00.5	49.4	14	09.8		83						
	02.6	49.3		13.3		83						
	56.7	50.0	15	09.3		80						
	59.9	50.0		13.5		80						
15	58.0	48.8	16	08.6		89						
16	00.5	48.8		12.2		89						

No. 50. Saigō (西郷) 2

Lat.=36° 12' 09" N., Long.=133° 20' 07" E.

Height=20 m

Sept. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Declination

Horizontal Intensity

Date	Time	δ
8	h m 8 21.9	° ' 6 33.9
	24.3	33.9
	57.9	35.3
	9 00.8	35.4
	59.9	38.3
	10 02.2	38.3
	58.3	39.9
	11 01.1	40.0
	58.5	41.1
	12 00.9	41.1
	13 00.0	40.4
	02.6	40.4
	58.9	39.8
	14 02.0	39.8
	15 01.4	39.0
	04.0	39.0
	16 01.8	36.4
	04.6	36.4
	59.3	35.8
	17 02.0	35.7
	56.9	35.4
	59.5	35.4
	18 56.2	35.5
	58.8	35.6
	19 59.6	36.1
	20 02.0	36.0
	58.9	35.7
	21 01.7	35.8
	59.6	35.8
	22 01.4	35.8
	58.9	35.2
	23 01.6	35.2
	58.5	35.6
	9 0 01.0	35.6
		58.8
	1 02.5	34.3
	58.9	34.9
	2 01.7	35.0
	58.4	35.1
	3 01.2	35.1
	59.1	35.1
	4 01.7	35.2
	5 00.6	34.8
	03.2	34.8
	57.5	34.3
	6 00.1	34.1
	58.4	33.4
	7 00.5	33.4
	58.4	33.3
	8 00.7	33.4
	9 00.4	33.8
	02.5	33.9
	58.4	34.6

Date	Time	δ
9	h m 10 01.0	° ' 6 34.7
	32.6	35.6
	34.5	35.7
	38.0	36.6
	11 00.7	36.7
		38.3
	58.4	38.1
	12 00.7	38.1
	58.8	39.0
	13 01.3	39.1
	59.0	38.3
	14 02.9	38.1
	58.5	37.2
	15 01.0	37.3
	58.1	36.3
	16 00.1	36.3

Date	Time	H
8	h m 9 07.9	r 30980
	12.2	79
	10 08.7	71
		70
	12.6	79
	11 07.4	79
	12.9	79
	12 07.2	90
	11.7	91
	13 11.5	31011
	16.7	11
	14 11.8	16
	15.9	14
	15 13.2	11
	17.9	11
	16 15.3	17
	20.0	19
	17 08.6	21
	12.7	18
	18 07.0	14
	11.6	14
	19 07.5	06
	11.6	05
	20 09.0	06
	14.8	06
	21 10.8	01
	14.8	01
	22 08.9	30998
	13.7	98
	23 09.1	96
	14.4	97
	9 0 08.8	31001
		01
	1 11.3	05
	16.5	07
	2 09.7	01
	17.7	01
	3 10.6	03
	14.5	03
	4 08.4	06
	12.7	06
	5 08.3	07
	11.6	08
	6 06.9	08
	10.6	08
	7 09.4	03
	13.9	03
	8 08.4	30998
	13.0	96
	9 10.6	93
	15.4	93
	10 08.8	96
	40.9	95
	44.6	96

Horizontal Intensity

Date	Time		H
9	^h	^m	^r
	11	06.6	30996
		10.1	96
	12	10.0	99
		13.6	31001
	13	09.8	10
		14.7	12
	14	13.0	21
		16.6	21
	15	10.7	23
		13.9	23
	16	08.5	27
		12.7	26

Dip

Date	Time		θ
8	^h	^m	[°] [']
	11	32.8	51 57.9
		37.8	58.0
	17	30.9	56.5
9		35.0	56.1
	23	25.7	57.8
		30.1	57.8
	5	26.6	57.5
		34.2	57.6
	11	22.5	58.1
		26.3	58.1

No. 51. Takayama (高山)

Lat.=36° 07' 55" N., Long.=137° 16' 57" E.

Height=621 m

July 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
30	^h 18 ^m 18.7	[°] 6 ['] 28.1
	20.0	28.1
	19 06.6	28.2
	08.7	28.1
	20 04.4	28.1
	08.5	28.1
	21 26.2	28.7
	29.2	28.7
	22 05.7	27.3
	09.0	27.2
	57.5	27.7
	23 00.3	27.9
	0 10.3	27.5
	14.2	27.6
31	55.2	27.2
	58.1	27.2
	2 12.6	26.8
	15.0	26.8
	57.1	27.0
	3 00.6	27.0
	4 07.7	26.9
	14.7	26.9
	57.9	26.7
	5 00.7	26.7
	6 24.1	25.1
	32.7	25.0
	7 07.3	24.4
	09.2	24.2
	55.4	26.1
	58.4	26.2
	9 04.7	26.0
	07.9	25.9
	57.3	28.2
	10 00.1	28.4
	56.2	30.3
	57.9	30.3
	12 00.3	32.0
	04.1	32.1
	05.8	33.1
	13 00.7	33.1
	57.5	33.5
	59.9	33.5
	15 01.8	32.6
	04.2	32.6
	59.9	30.8
	16 02.6	30.8
	56.6	29.4
	59.9	29.1
	18 16.1	29.2
	20.9	29.1
	19 00.0	28.4
	02.3	28.4
	59.7	28.3
	20 03.7	28.3

Date	Time	H
30	^h 18 ^m 30.5	^r 30544
	33.8	44
	19 20.0	40
	26.4	40
	20 22.2	37
	26.9	37
	21 37.4	46
	41.9	45
	22 22.9	46
	28.0	44
	23 09.9	42
	14.9	43
	0 27.3	46
	34.3	46
31	1 05.7	44
	11.7	46
	2 25.0	46
	28.7	44
	3 07.7	43
	12.6	45
	4 26.7	37
	30.5	38
	5 11.7	40
	15.7	41
	6 35.4	31
	39.9	30
	7 17.6	25
	20.9	24
	8 10.0	20
	14.7	22
	9 15.6	20
	19.6	18
	10 07.6	04
	11.2	05
	11 05.1	12
	08.1	13
	12 11.8	23
	15.4	22
	13 07.7	30
	13.3	32
	14 09.7	37
	15.4	36
	15 11.1	37
	15.0	34
	16 10.1	40
	13.8	40
	17 08.1	39
	12.1	39
	18 29.5	31
	32.6	31
	19 09.3	32
	13.6	31
	20 13.5	37
	16.4	37

Date	Time	θ
30	^h 23 ^m 32.9	[°] 49 ['] 30.2
	39.8	30.0
31	5 29.2	31.9
	35.9	32.0
	11 21.2	32.4
	25.2	32.4
	17 21.9	31.4
	24.7	31.5

No. 52. Hisiura (菱 浦)

Lat.=36° 05' 58" N., Long.=133° 04' 40" E.

Height=20 m

Sept. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Date	Time	δ
	h m	° '
13	6 58.6	6 25.3
	7 01.3	25.1
	58.2	24.6
	8 01.3	24.6
	59.3	27.2
	9 01.8	27.2
	58.3	28.9
	10 01.0	29.3
	59.3	30.3
	11 01.3	30.3
	58.2	31.3
	12 00.3	31.3
	59.4	31.1
	13 02.8	31.5
	58.7	31.1
	14 01.2	31.1
	58.5	29.9
	15 00.9	29.8
	16 00.3	27.9
	03.3	27.9
	58.3	26.9
	17 00.6	27.1
	58.6	28.6
	18 00.7	28.7
	57.9	29.4
	19 00.0	29.4
	59.0	25.3
	20 01.8	25.6
	58.6	28.6
	21 00.8	28.6
	58.9	28.7
	22 01.9	28.6
	58.1	28.5
	23 00.7	28.5
	58.7	27.6
14	0 01.2	27.4
	58.8	26.4
	1 01.4	26.4
	59.0	27.0
	2 01.5	27.0
	58.9	26.6
	3 01.7	26.8
	4 06.5	27.4
	09.0	27.4
	58.7	27.0
	5 01.4	27.1
	57.3	27.5
	59.4	27.4
	6 58.4	26.6
	7 00.7	26.6
	59.2	27.2
	8 01.6	27.2
	58.4	28.1
	9 00.8	28.1

Declination

Date	Time	δ
	h m	° '
14	9 58.5	6 29.3
	10 00.4	29.4
	57.7	31.1
	11 00.5	31.1
	58.1	31.8
	12 00.1	31.7
	56.7	31.6
	58.8	31.7
	13 57.1	31.4
	59.7	30.9
	14 59.9	29.5
	15 02.3	29.4
	58.2	29.3
	59.9	29.4
	16 57.9	28.8
	59.8	29.0
	17 58.7	28.1
	18 01.4	27.9
	59.3	28.3
	19 01.6	28.3
	59.2	26.6
	20 01.1	26.6
	59.4	28.6
	21 01.8	28.6
15	57.7	28.9
	59.8	28.8
	22 56.7	28.7
	59.1	28.7
	23 57.7	28.3
	0 00.4	28.3
	58.1	28.2
	1 00.5	28.2
	57.7	27.9
	2 01.0	27.9
	58.1	28.0
	3 00.9	27.9
	57.9	27.6
	4 00.4	27.5
	59.3	27.5
	5 01.5	27.5
	57.7	27.4
	6 00.3	27.3
	7 05.1	27.2
14	07.0	27.4
	8 03.3	26.9
	05.2	26.9
	57.8	27.8
15	9 00.0	27.9

Horizontal Intensity

Date	Time	H
	h m	r
13	7 11.1	30649
	18.0	49
	8 08.7	39
	13.0	38
	9 08.8	32
	13.0	32
	10 12.1	24
	18.5	22
	11 07.9	22
	11.3	22
	12 07.2	23
	11.0	22
	13 18.0	38
	21.3	37
	14 07.5	27
	12.0	27
	15 08.1	35
	11.7	37
	16 11.7	31
	16.5	30
	17 08.3	30
	12.1	32
	18 07.5	40
	11.1	41
	19 10.5	21
	15.0	20
	20 10.5	40
	15.9	38
	21 10.1	30
	14.9	29
	22 09.3	36
	13.2	35
	23 07.3	35
	11.6	32
	18.2	31
	22.1	31
14	0 09.3	30
	13.4	28
	1 09.1	41
	13.1	41
	2 08.5	40
	13.4	41
	3 08.6	16
	11.4	17
	4 15.2	43
	18.7	43
	5 15.1	39
	18.9	40
	6 07.1	41
	15.1	42
	7 09.4	35
	14.2	35
	8 07.8	34
	12.0	33

Horizontal Intensity

Dip

Date	Time	H
14	^h 9 ^m 07.8	^r 30630
	11.9	30
	10 07.4	29
	10.8	30
	11 07.9	38
	11.9	39
	12 06.2	51
	10.1	54
	13 04.9	82
	09.8	88
	14 06.6	61
	09.8	63
	15 08.4	56
	11.5	56
	16 06.2	45
	14.6	44
	17 07.6	30
	12.4	29
	18 12.2	36
	15.4	37
	19 09.0	27
	13.3	27
	20 09.5	46
	14.0	46
	21 10.8	30
	14.6	30
	22 06.9	32
	10.9	34
	23 06.1	37
15	10.0	36
	0 09.4	44
	13.6	43
	1 06.6	42
	10.7	41
	2 11.8	43
	14.8	43
	3 08.0	44
	12.0	45
	4 09.8	47
	13.5	47
	5 09.6	47
	13.3	47
	6 06.4	46
	09.7	46
	7 15.2	46
	20.4	45
	8 13.3	43
	18.3	42

Date	Time	θ
13	^h 11 ^m 24.7	[°] 50 ['] 7.6
	28.2	7.6
	17 29.0	7.8
	33.2	7.8
	23 30.8	8.1
	35.2	8.6
14	41.8	7.9
	5 29.0	7.9
	32.5	7.9
	11 25.0	6.3
	28.6	6.5
	17 30.6	8.0
15	33.2	8.0
	23 19.1	7.5
	22.8	7.4
	5 25.0	7.1
	29.0	7.1

No. 53. Takehu (武 生)

Lat.=35° 51' 22" N., Long.=136° 05' 25" E.

Height=180 m

Aug. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination Horizontal Intensity Dip

Date	Time	δ
	h m	° '
14	18 11.6	6 40.5
	14.9	40.5
	59.3	40.2
	19 01.8	40.2
	52.5	40.7
	20 00.1	40.7
	21 00.1	40.7
	02.5	40.7
	58.0	40.0
	22 01.0	39.9
	23 14.3	41.6
	16.5	41.5
	1 13.6	40.4
	18.4	40.3
15	56.0	40.3
	58.6	40.5
	2 57.9	39.2
	3 00.7	39.2
	57.3	39.5
	59.7	39.8
	4 58.5	38.6
	5 01.3	38.6
	6 11.6	38.3
	13.4	38.3
	58.1	37.3
	59.4	37.2
	7 56.7	36.7
	59.6	36.7
	9 07.5	38.8
	10.4	38.9
	59.1	40.2
	10 02.0	40.1
	58.6	44.0
	11 01.7	44.1
	56.7	45.5
	59.4	45.6
	12 57.5	45.3
	59.8	45.3
	13 57.6	45.5
	59.8	45.5
	14 57.9	44.1
	59.9	44.1
	15 58.3	41.9
	16 01.3	41.7
	58.6	41.1
	17 00.9	41.1
	57.9	41.8
	18 00.6	41.7
	58.2	41.7
	19 01.1	41.7
	56.8	41.7
	58.9	41.6
	20 59.8	39.5
	21 02.7	39.2
	22 06.6	40.9
	08.8	40.9
	58.2	41.4
	23 01.4	41.4
16	0 00.0	41.5
	02.2	41.5
	1 03.7	40.7
	16.1	40.7

Date	Time	H
	h m	r
14	18 27.5	30820
	31.1	19
	19 09.4	11
	13.8	11
	20 07.3	03
	11.1	02
	21 12.1	15
	16.1	14
15	1 25.1	30
	29.7	30
	2 07.7	16
	11.8	16
	3 09.2	18
	13.1	16
	4 07.0	20
	11.0	20
	5 10.5	08
	14.5	08
	6 20.1	14
	23.8	13
	7 06.3	13
	10.2	13
	8 06.2	20
	10.5	20
	9 19.8	20
	23.1	20
	10 06.4	28
	10.1	30
	11 10.0	31
	13.5	31
	12 06.9	34
	09.9	32
	13 06.0	53
	09.4	53
	14 08.2	56
	11.4	56
	15 06.0	46
	09.4	45
	16 08.2	30
	11.7	29
	17 10.3	16
	13.8	15
	18 09.3	08
	12 7	08
	19 07.7	06
	11.9	06
	20 07.0	11
	11.1	11
	21 17.8	26
	23.7	26
	22 16.7	18
	21.9	18
	23 08.3	06
	11.4	06
16	0 09.6	07
	13.1	08
	1 11.4	10
	15.2	09

Date	Time	θ
	h m	° '
15	5 55.5	49 19.6
	58.1	19.6
	11 34.1	17.1
	39.1	17.1
	17 30.1	19.1
	34.3	18.9
	23 23.8	20 6
	27.5	20.6

No. 54. Nirasaki (萑 崎)

Lat.=35° 42' 47" N., Long.=138° 27' 18" E.

Height=360 m

Sept. 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
15	^h ^m 17 20.3	[°] ['] 6 23.7
	22.3	23.7
	18 00.2	24.3
	02.8	23.9
	05.5	23.8
	59.6	22.0
	19 02.1	22.2
	04.3	22.2
	20 12.7	23.6
	15.0	23.6
	58.3	23.3
	59.7	23.3
	22 04.0	23.8
	05.6	23.8
	23 01.4	23.6
	03.1	23.7
	58.3	23.8
	16 0 00.3	23.8
	57.3	23.0
	59.1	23.0
16	1 59.4	22.6
	2 01.7	22.6
	59.2	22.2
	3 01.2	22.2
	4 01.2	22.0
	03.6	22.1
	5 01.8	22.0
	04.1	22.0
	58.1	21.9
	59.6	21.9
	6 59.4	21.7
	7 01.5	21.6
	58.2	21.8
	8 01.4	21.7
	57.5	23.4
	58.8	23.4
	9 58.7	26.5
	10 00.0	26.5
	57.4	27.7
	58.8	27.7
12	00.2	27.8
	01.7	27.7
	59.9	27.1
	13 00.9	27.1
	59.2	25.7
	14 01.3	25.7
	15 00.0	24.6
	01.5	24.6
	57.6	23.7
	59.1	23.7
	16 54.1	23.8
	55.4	23.8

Date	Time	H
15	^h ^m 17 35.9	^r 30359
	39.9	58
	18 18.6	36
	23.0	32
	27.2	32
	19 15.7	37
	19.1	37
	20 30.0	35
	33.0	33
	35.9	35
	21 09.9	41
	13.4	42
	22 14.5	54
	18.2	55
	23 13.9	61
	16.8	62
	16 0 08.0	72
	10.9	72
	1 08.8	70
	12.0	68
16	2 10.8	69
	14.1	69
	3 11.8	71
	16.0	72
	20.1	73
	4 12.4	77
	15.8	76
	5 12.1	72
	15.6	74
	6 38.3	69
	41.7	68
	7 10.1	66
	13.8	67
	8 27.5	63
	31.0	65
	9 05.2	61
	08.3	61
	10 07.5	47
	11.1	47
	11 08.6	65
12	11.1	66
	12 09.8	72
	13.1	72
	13 10.1	67
	13.0	66
	14 09.8	71
	12.7	70
	15 12.0	56
	15.8	58
	19.4	54
	16 05.3	44
	08.0	44
	56.8	46
	58.9	46

Date	Time	θ
15	^h ^m 23 34.4	[°] ['] 49 1.1
	44.8	1.1
16	5 35.4	1.0
	39.1	1.0
	11 26.5	0.3
	29.7	0.3
	16 22.3	2.8
	24.9	2.9

No. 55. Iioka (飯岡)

Lat.=35° 42' 15" N., Long.=140° 43' 18" E.

Height=5 m

Sept. 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
6	13 58.1	56.2
	14 00.9	55.8
	06.2	55.8
	08.6	55.8
	15 07.0	54.2
	08.8	54.2
	09.9	53.3
	16 03.0	53.3
	07.5	53.3
	09.5	53.2
	18 05.7	53.0
	07.9	53.0
	08.9	52.8
	19 00.7	52.9
	20 00.6	52.8
	02.5	52.8
	21 06.1	52.7
	07.9	52.7
	22 03.9	52.6
	05.7	52.5
	08.5	52.5
	23 00.3	52.5
	08.2	52.3
7	0 01.2	52.1
	08.6	51.1
	1 00.1	51.1
	08.0	50.9
	2 00.8	50.9
	08.6	48.8
	3 00.2	48.7
	4 03.2	52.7
	05.5	52.8
	09.7	53.2
	5 02.2	53.1
	08.9	52.6
	6 01.4	52.5
	7 02.5	53.2
	05.5	53.2
	8 00.5	52.4
	02.8	52.4
	09.7	54.3
	9 01.6	54.3
	10 00.2	54.4
	02.0	54.3
	06.2	56.2
	07.6	56.2
	11 08.5	56.0
	09.9	55.9
	12 06.7	55.9
	08.1	55.8
	13 08.5	54.5
	14 00.2	54.5

Date	Time	H
	h m	°
6	14 56.5	30433
	15 00.1	33
	16 19.9	38
	23.0	38
	17 08.5	38
	12.9	39
	18 19.5	43
	23.1	43
	19 13.1	48
	17.5	49
	20 13.4	45
	18.9	41
	24.0	43
	21 20.7	49
	26.3	50
	22 16.8	54
	20.7	52
	23 21.9	48
	25.5	49
7	0 22.4	61
	26.0	61
	1 09.8	62
	14.9	59
	18.3	57
	22.3	54
	2 25.6	52
	29.6	52
	3 09.9	40
	14.7	42
	4 16.3	38
	20.2	39
	5 16.2	42
	19.3	44
	6 12.0	48
	14.9	48
	7 14.6	31
	17.7	31
	10 41.6	23
	44.7	23
	11 04.6	28
	07.7	28
	12 08.6	19
	12.7	17
	13 08.1	19
	12.1	20
	14 07.8	26
	11.6	25

Date	Time	θ
	h m	° '
6	17 43.9	48 20.0
	47.4	20.1
	23 41.1	19.8
7	43.1	19.8
	5 34.5	21.9
	38.0	21.9
	11 29.5	21.9
	32.3	21.9

No. 56. Miyazu (宮 津)

Lat.=35° 32' 06" N., Long.=135° 11' 30" E.

Height=30 m

Aug. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ	Date	Time	H	Date	Time	θ
24	^h 7 ^m 39.5	[°] 6 ['] 26.5	24	^h 10 ^m 17.7	^r 30911	24	^h 11 ^m 33.5	[°] 49 ['] 5.2
	45.9	26.7		22.0	11		39.5	5.2
	8 02.1	26.5		11 09.0	09		17 43.6	5.1
	04.4	26.6		14.3	08		46.7	5.1
	10 02.5	30.0		12 25.1	23		23 45.2	6.4
	04.6	30.2		29.4	24		49.2	6.7
	58.9	31.9		13 06.9	29	25	5 30.6	5.0
	11 06.1	31.8		09.9	29		43.4	5.0
	12 02.3	33.1		14 11.7	34		11 33.4	5.5
	04.8	33.3		14.8	36		36.1	5.5
	56.7	33.3		15 06.9	51			
	59.2	33.8		09.7	51			
	14 03.4	31.8		16 13.2	44			
	05.0	31.6		16.9	43			
	59.3	30.4		17 10.0	31			
	15 01.2	30.4		14.8	32			
	16 03.7	29.7		18 39.5	23			
	05.7	29.8		43.1	22			
	17 02.0	29.4		19 15.3	21			
	03.9	29.2		19.9	21			
	18 24.0	29.2		20 32.5	16			
	26.4	29.3		38.1	16			
	19 02.5	29.1		21 24.5	16			
	05.2	29.5		28.0	15			
	20 00.3	29.2		22 16.4	23			
	02.7	29.2		21.9	23			
	21 03.0	29.9		23 30.4	21			
	05.8	29.9		34.2	23			
	22 04.6	29.1	25	0 24.8	22			
	07.3	29.2		28.8	23			
	23 22.5	27.9		1 14.6	24			
	24.2	27.9		19.5	24			
25	0 10.0	27.8		2 10.4	26			
	12.7	27.9		15.9	26			
	1 01.6	27.4		3 12.1	28			
	04.9	27.4		17.2	27			
	59.8	27.2		4 15.0	25			
	2 02.3	27.2		23.7	25			
	59.0	27.0		5 05.2	28			
	3 02.0	27.0		10.2	28			
	56.5	27.0		6 24.5	14			
	59.3	27.2		35.2	10			
	4 54.5	26.9		40.4	09			
	56.4	26.9		7 09.7	00			
	6 07.6	24.6		13.3	00			
	09.7	24.6		8 08.0	895			
	59.3	23.9		12.2	97			
	7 02.7	24.1		9 03.8	93			
	58.6	25.1		07.6	97			
	8 00.9	24.8		10 07.4	99			
	54.8	26.7		11.7	99			
	57.0	26.8		11 08.6	909			
	9 58.2	29.6		11.4	10			
	10 00.1	29.3		12 09.9	16			
	58.2	31.8		13.4	17			
	11 00.4	31.9						
	57.4	32.6						
	12 01.5	32.6						

No. 57. Iida (飯 田)

Lat.=35° 30' 37" N., Long.=137° 50' 13" E.

Height=484 m

July 1955

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
30	h m	° '
	6 59.2	6 15.4
	7 06.0	14.9
	55.1	16.4
	8 01.5	16.5
	9 01.8	17.9
	06.0	17.9
	10 01.2	19.8
	05.1	19.8
	57.1	21.6
	11 01.9	22.1
	12 35.1	22.2
	41.3	21.5
	13 16.8	23.3
	22.2	23.3
	14 03.2	23.3
	06.3	23.2
	15 03.5	22.7
	07.1	22.7
	16 22.9	21.6
	26.1	21.4
	17 05.5	20.8
	11.9	20.7
	18 37.1	20.1
	42.0	19.9
	19 32.4	20.4
	37.8	20.2
	20 14.5	20.2
	18.1	20.1
	21 07.6	19.6
	10.8	19.7
	22 03.0	19.5
	06.9	19.7
	53.7	19.6
	57.0	19.9
31	0 02.1	18.7
	05.2	18.7
	53.4	18.3
	57.1	18.3
	1 58.3	17.8
	2 03.0	17.9
	55.3	17.8
	3 02.3	18.1
	54.9	17.8
	58.6	17.8
	5 01.4	17.7
	05.1	17.9
	6 35.9	16.7
	38.4	16.8
	7 12.7	16.5
	15.8	16.6
	8 12.6	17.9
	20.4	18.1

Date	Time	H
30	h m	r
	7 30.5	30589
	36.4	601
	8 18.9	580
	23.8	96
	9 34.0	603
	38.9	599
	10 14.9	83
	19.9	99
	11 12.0	621
	17.3	25
	12 52.5	15
	56.9	18
	13 38.0	587
	45.9	86
	14 20.0	609
	27.2	06
	15 17.4	16
	25.3	10
	16 44.8	10
	52.7	03
	17 21.1	07
	27.3	08
	19 07.8	599
	13.3	600
	56.8	599
	20 04.1	601
	27.2	02
	43.9	07
	21 18.6	599
	22.9	604
	22 16.9	18
	25.6	06
	23 05.8	09
	10.4	15
31	0 12.7	10
	17.8	15
	1 08.0	08
	13.4	07
	2 13.3	596
	17.4	96
	3 13.7	606
	18.6	02
	4 08.3	00
	14.3	07
	5 23.6	580
	34.3	71
	6 50.5	637
	59.0	51
	7 30.4	583
	36.7	81
	8 43.5	84
	52.6	88

Date	Time	θ
30	h m	° '
	11 34.0	48 41.3
	40.6	41.0
	17 47.0	43.1
	53.5	43.7
31	23 26.0	42.4
	31.0	42.7
	5 51.7	43.8
	56.5	43.9

No. 58. Obama (小 浜) 1

Lat.=35° 30' 18" N., Long.=135° 44' 52" E.

Height=1 m

Aug. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
19	^h ^m	[°] [']
	17 59.6	6 35.1
	18 02.3	35.1
	59.5	35.6
	19 01.7	35.6
	57.2	36.0
	59.4	36.0
	20 58.6	35.6
	21 00.8	35.6
	22 00.3	36.1
	03.1	36.1
	23 00.0	36.2
	03.2	36.3
20	0 22.0	36.1
	24.3	36.1
	57.8	36.1
	1 00.8	36.0
	58.5	35.4
	2 01.8	35.4
	48.0	35.5
	52.1	35.5
	4 29.5	35.1
	31.4	35.1
	5 01.9	34.8
	04.0	34.8
	6 11.3	33.9
	13.4	33.9
	7 03.1	33.0
	05.8	33.0
	8 01.7	32.7
	03.5	32.8
	57.6	34.2
	9 00.0	34.3
	10 00.5	36.6
	04.1	36.8
	11 03.1	39.1
	04.8	39.1
	57.9	40.8
	59.8	40.8
	12 57.3	41.2
	59.2	41.1
	13 55.9	40.5
	58.6	40.3
	15 02.7	37.6
	05.3	37.6
	58.1	36.6
	16 00.2	36.4
	17 00.4	35.6
	03.4	35.6
	18 02.4	36.1
	04.4	36.1

Date	Time	H
19	^h ^m	^r
	18 11.2	30912
	15.0	13
	19 08.9	20
	12.6	20
	20 07.1	16
	12.3	15
	21 13.1	15
	16.6	13
	22 15.1	15
	19.8	15
	23 14.0	20
	18.5	19
20	0 36.1	21
	40.7	21
	1 09.4	19
	13.7	20
	2 12.4	20
	17.2	20
	3 08.9	22
	12.2	22
	5 12.3	27
	15.4	27
	6 27.2	23
	32.7	23
	7 06.9	12
	13.1	12
	8 18.4	01
	22.9	00
	9 07.4	892
	11.6	92
	10 11.8	92
	16.6	93
	11 12.5	900
	16.6	02
	12 06.2	09
	10.0	09
	13 05.5	19
	09.7	21
	14 08.2	26
	12.0	26
	15 07.3	29
	23.4	29
	16 07.5	26
	11.0	26
	17 13.0	19
	16.3	19
	18 10.4	16
	13.6	16

Date	Time	θ
19	^h ^m	[°] [']
	23 35.0	49 0.1
20	42.1	0.1
	5 46.2	1.0
	54.6	1.1
	11 35.8	0.2
	40.3	0.0
	17 31.2	0.3
	36.4	0.5

No. 59. Obama (小 浜) 2

Lat.=35° 30' 09" N., Long.=135° 44' 49" E.

Height=1 m

Aug. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
18	h m 7 29.1	° ' 6 31.1
	31.2	31.1
	8 00.2	31.7
	02.2	31.6
	59.6	33.5
	9 02.6	33.6
	59.2	36.6
	10 01.5	36.7
	11 00.1	38.1
	03.3	38.1
	12 03.4	40.1
	05.3	40.1
	13 02.6	40.9
	04.7	40.9
	14 02.5	40.2
	04.3	40.2
	56.4	39.2
	58.7	39.2
	15 57.6	36.9
	59.4	36.9
	17 01.5	35.7
	03.6	35.7
	18 03.9	35.6
	05.8	35.6
	19 03.5	35.6
	05.5	35.6
	20 01.7	35.2
	02.9	35.1
	21 07.9	35.7
	09.2	35.7
	22 07.1	36.1
	09.5	36.1
	59.7	36.1
	23 02.0	36.1
19	0 03.1	36.0
	05.1	36.0
	57.2	35.8
	1 00.1	35.8
	58.8	35.9
	2 02.1	35.9
	58.7	35.5
	3 01.0	35.4
	59.3	35.0
	4 02.1	34.9
	5 05.0	34.7
	07.2	34.7

Date	Time	H
18	h m 8 11.9	r 30899
	15.8	97
	9 09.7	99
	13.3	99
	10 07.9	900
	11.3	899
	11 14.9	914
	17.6	16
	12 20.4	26
	23.7	27
	13 17.8	41
	26.1	41
	14 11.3	36
	15.3	29
	15 05.3	23
	09.1	21
	16 06.7	19
	10.7	20
	17 10.0	14
	12.9	15
	18 23.5	16
	31.8	15
	19 11.3	09
	14.0	08
	20 09.8	12
	13.7	12
	21 15.9	07
	19.1	09
	22 20.0	15
	26.1	16
	23 09.5	16
	13.0	15
19	0 12.1	16
	16.1	16
	1 07.5	17
	10.9	16
	2 22.3	17
	42.3	16
	3 12.5	17
	17.8	17
	4 11.6	15
	18.5	16
	5 17.0	16
	21.8	16

Date	Time	θ
18	h m 11 29.1	° ' 48 57.8
	34.9	57.9
	17 31.5	49 0.2
	35.7	0.1
19	23 23.8	48 59.7
	28.4	59.7
	6 01.4	59.3
	05.8	59.1

No. 60. Tottori (鳥 取)

Lat.=35° 28' 50" N., Long.=134° 15' 22" E.

Height=11 m

Sept. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Date	Time	δ
	h m	° '
1	13 02.5	6 44.5
	06.8	44.4
	14 02.5	42.4
	04.6	42.4
	15 02.6	40.5
	05.0	40.4
	58.6	39.9
	16 00.7	39.9
	58.7	39.9
	17 01.4	39.9
	18 07.1	40.5
	09.2	40.5
	58.4	41.0
	19 00.8	41.0
	20 00.9	41.0
	03.6	41.1
	21 02.3	41.0
	04.7	41.0
	22 00.2	40.5
	02.2	40.5
	57.8	39.8
	59.9	39.8
2	0 09.8	40.2
	11.9	40.2
	59.3	39.9
	1 01.5	39.8
	56.6	40.1
	59.6	40.1
	3 01.0	40.0
	03.6	40.0
	59.7	39.8
	4 02.7	39.8
	59.8	41.5
	5 01.3	41.5
	6 00.5	39.0
	03.0	38.9
	57.8	38.5
	59.3	38.4
	7 59.0	38.9
	8 01.3	38.9
	9 01.9	39.9
	03.3	39.9
	57.5	43.3
	59.8	43.4
	10 55.0	45.0
	59.1	45.1
	11 58.5	47.6
	12 00.8	47.7
	59.2	47.8
	13 02.1	47.7
	14 00.3	45.9
	02.8	45.9
	58.7	44.2
	15 00.4	44.0

Declination

Date	Time	δ
	h m	° '
2	16 00.2	6 41.9
	02.3	41.8
	17 09.4	40.3
	11.3	40.4
	18 02.8	40.3
	04.9	40.3
	19 02.8	40.7
	05.5	40.7
	20 03.1	39.5
	04.9	39.5

Horizontal Intensity

Date	Time	H
	h m	r
1	13 14.6	31059
	19.4	58
	14 12.9	63
	17.0	63
	15 11.6	63
	15.7	64
	16 07.4	58
	08.3	58
	17 10.5	41
	14.4	43
	18 21.4	24
	28.7	26
	19 09.5	38
	13.8	38
	20 13.3	43
	18.5	43
	21 12.1	41
	14.9	41
	22 10.7	36
	14.0	36
	23 07.2	42
	11.7	42
2	0 18.5	24
	22.2	23
	1 08.7	22
	12.2	22
	2 12.5	21
	17.6	20
	3 11.6	23
	16.7	23
	4 13.5	24
	17.5	24
	5 07.3	30
	11.0	30
	6 11.5	33
	15.3	33
	7 06.7	23
	10.0	23
	8 08.1	14
	12.2	14
	9 09.7	21
	14.7	21
	10 07.2	19
	10.9	19
	11 07.9	35
	12.5	36
	12 09.8	30
	15.0	30
	13 12.0	46
	16.2	46
	14 07.8	48
	11.0	47
	15 07.8	42
	11.2	42

Horizontal Intensity

Dip

Date	Time		H
2	^h	^m	^r
	16	09.5	31038
		13.2	38
	17	19.8	23
		22.9	23
	18	12.9	18
		16.5	16
	19	12.6	30993
		15.9	91
	20	11.2	87
		15.5	88

Date	Time		θ	
1	^h	^m	[°]	[']
	17	38.7	49	25.2
		45.9		25.3
2	23	48.6		25.8
		52.0		25.6
	5	30.6		25.8
		35.1		25.9
	11	32.9		22.9
		36.9		23.3
	17	39.1		24.7
		44.5		24.7

No. 61. Yonago (米子)

Lat.=35° 25' 37" N., Long.=133° 19' 33" E.

Height=1 m

Sept. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Date	Time	δ
	h m	° '
4	18 59.2	28.7
	19 02.2	28.5
	20 05.0	30.0
	07.7	30.0
	21 07.9	30.7
	10.2	30.6
	22 00.4	30.7
	02.5	30.7
	23 01.1	31.1
	03.9	31.1
	05.0	31.6
	5 01.9	31.5
	05.5	30.0
	1 01.7	30.1
5	2 16.0	30.9
	17.7	31.0
	3 01.4	30.8
	03.8	30.7
	05.8	30.5
	4 01.5	30.6
	5 04.0	30.4
	06.8	30.4
	09.2	30.4
	6 02.3	29.6
	04.3	29.6
	07.2	28.8
	09.2	28.8
	7 56.3	29.4
	05.6	29.4
	8 59.9	31.3
	9 02.4	31.6
	07.6	34.7
	09.9	34.7
	10 58.5	37.2
	11 02.5	37.2
	12 03.5	36.6
	06.8	36.5
	08.8	36.5
	13 01.8	36.4
	08.1	36.9
	09.7	37.1
	14 01.0	35.5
	03.3	35.7
	15 01.5	34.5
	03.9	34.5
	05.4	34.2
	16 01.1	34.2
	07.7	33.6
	09.9	33.5
	17 59.3	32.4
	18 02.1	32.4
	07.8	30.6
	19 00.3	30.7
	07.8	32.4

Declination

Date	Time	δ
	h m	° '
5	20 00.7	32.3
	05.7	31.8
	21 02.2	31.6
	03.4	32.0
	04.5	32.2
	05.9	31.5
	07.8	31.6
	22 58.5	32.6
	23 01.6	32.6
	07.4	32.3
6	0 00.2	32.3

Horizontal Intensity

Date	Time	H
	h m	°
4	19 17.9	30910
	23.6	13
	20 15.5	21
	20.4	24
	21 17.1	13
	22.3	16
	22 12.4	27
	17.7	30
	23 15.0	40
	19.1	39
	0 09.9	44
	13.7	44
	1 09.2	36
	12.6	35
5	2 24.1	40
	27.2	39
	3 10.7	44
	13.7	44
	4 08.2	48
	12.8	51
	16.0	51
	5 17.7	49
	22.5	49
	6 13.3	45
	18.0	46
	7 08.8	46
	13.0	45
	8 06.6	34
	12.3	34
	9 11.2	21
	26.9	22
	10 10.1	21
	15.5	21
	11 15.4	30
	21.7	31
	12 16.8	52
	21.0	52
	13 17.3	59
	21.3	60
	14 10.5	55
	14.2	54
	15 14.3	37
	22.4	36
	25.8	36
	16 11.0	34
	14.4	29
	17 07.3	15
	13.8	14
	18 11.1	19
	16.3	14
	19 10.0	17
	14.5	16
	20 09.7	11
	14.4	13

* Cell 3

Horizontal Intensity

Date	Time		H
5	^h	^m	^r
	21	09.5	30927
		14.2	39
		23.5	59
		27.3	66
		47.6	51
		51.4	50
	22	04.1	46
		07.8	44
	23	12.5	39
6	0	17.4	39
		07.5	37
		11.2	37

Dip

Date	Time		θ
4	^h	^m	[°] [']
	23	29.5	49 37.4
5		33.0	37.0
	5	36.1	36.6
		41.8	36.5
	11	36.6	36.0
		39.7	36.3
	17	28.5	37.5
		32.2	37.4

No. 62. Hozumi (穂 積)

Lat.=35° 22' 39" N., Long.=135° 42' 08" E.

Height=5 m

Aug. 1955

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
13	h m 10 01.1	° ' 6 21.5
	05.0	21.7
	56.8	23.2
	11 04.8	23.4
	12 07.7	25.3
	11.7	25.5
	13 03.3	26.8
	06.0	26.8
	56.6	26.8
	59.6	26.4
	14 59.7	25.1
	15 02.6	24.8
	58.6	23.0
	16 02.1	22.9
	52.2	21.3
	17 00.2	21.3
	18 01.8	20.1
	07.3	19.9
	19 00.3	20.0
	11.0	20.5
	20 01.8	20.8
	04.9	20.9
	21 00.0	21.2
	03.5	21.2
	22 04.8	20.8
	07.6	20.7
	23 53.3	20.9
	56.1	20.9
14	0 21.7	20.7
	25.5	20.8
	59.6	20.8
	1 04.1	20.6
	59.9	20.1
	2 03.0	20.1
	3 02.9	20.0
	06.9	20.0
	4 00.4	19.6
	03.8	19.7
	58.6	19.2
	5 03.2	19.2
	6 13.5	16.6
	16.2	16.5
	7 01.9	16.2
	06.3	15.9
	8 04.7	16.7
	08.5	17.1
	9 00.0	20.0
	03.3	20.4
	10 08.9	23.5
	12.5	24.2

Date	Time	H
13	h m 10 28.8	° 30819
	34.1	32
	11 19.7	40
	25.9	40
	12 24.1	55
	28.9	57
	13 19.5	53
	23.8	54
	14 09.0	57
	13.6	58
	15 11.5	57
	15.9	59
	16 09.2	59
	12.8	60
	17 06.9	57
	12.7	55
	18 17.7	57
	23.8	60
	19 41.0	64
	46.0	64
	20 17.4	65
	23.7	65
	21 34.0	62
	39.1	63
	22 19.9	66
	24.0	69
14	0 02.3	75
	05.7	71
	31.2	69
	37.4	69
	1 13.7	70
	18.1	72
	2 10.8	76
	15.2	75
	3 15.1	72
	19.8	71
	4 11.0	72
	15.7	72
	5 11.3	72
	15.4	72
	6 26.7	62
	30.4	64
10	7 14.8	54
	18.9	55
	8 19.6	49
	23.6	43
	9 13.5	73
	18.4	75
	10 24.1	48
	29.1	43
	35.7	43

Date	Time	θ
13	h m 11 39.7	° ' 48 41.6
	45.5	42.3
	17 24.5	41.8
	28.9	42.2
	23 31.8	42.9
14	35.7	42.9
	5 27.3	42.0
	31.3	41.3

No. 63. Imai (今 市)

Lat.=35° 21' 30" N., Long.=132° 45' 10" E.

Height=8 m

Sept. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination			Horizontal Intensity			Dip					
Date	Time		δ	Date	Time		H	Date	Time		θ
17	h	m	°	17	h	m	r	17	h	m	°
	15	58.6	6 26.4		16	17.5	30852		17	34.8	49 46.5
	16	01.2	26.4			25.8	55			37.7	46.6
		59.7	25.3		17	11.6	52		23	41.3	45.2
	17	02.1	25.4			18.8	54			45.5	45.4
		58.7	23.9		18	10.3	49		18	11 37.6	45.5
	18	02.1	23.9			19.8	52			41.4	45.5
		59.3	25.2		19	10.3	70		17	30.3	46.6
	19	02.3	25.4			15.3	65			33.8	46.7
		58.5	25.2		20	07.1	71				
	20	00.6	25.2			12.8	71				
		58.5	23.8		21	09.4	70				
	21	00.7	23.7			14.6	68				
		59.9	24.5		22	14.3	62				
	22	03.3	24.4			19.2	62				
		58.6	23.6		23	08.6	72				
		59.9	23.6			13.0	74				
	23	59.1	24.0		18	0 10.4	80				
	18	0 02.2	23.9			15.3	77				
		59.6	24.6		1	12.0	80				
	1	02.8	24.6			18.5	78				
	59.9	24.3	2	11.5	78						
2	01.6	24.3		15.8	77						
3	00.5	24.1	3	09.5	75						
	03.2	24.1		27.6	78						
4	01.4	25.2	4	11.3	75						
	03.7	25.2		14.6	74						
	59.5	25.5	5	10.1	81						
5	01.7	25.3		14.1	80						
6	07.7	24.9	6	21.5	84						
	12.5	25.2		25.2	85						
	59.9	24.2	7	12.4	84						
7	02.4	24.2		19.2	80						
8	00.4	23.3	8	10.1	75						
	02.2	23.1		13.9	77						
	58.3	22.6	9	06.7	66						
9	00.5	22.5		10.7	64						
	59.0	24.1	10	09.7	60						
10	01.3	24.2		14.0	60						
	59.0	26.0	11	08.4	60						
11	01.1	26.0		13.2	58						
	58.3	27.7	12	09.9	61						
12	00.6	27.9		14.7	61						
	59.8	28.4	13	13.2	75						
13	02.3	28.5		18.9	76						
	57.8	28.1	14	06.6	84						
	59.1	28.1		11.4	83						
14	56.9	26.8	15	08.1	84						
	59.3	26.8		12.7	87						
15	58.7	25.2	16	11.6	74						
16	01.5	25.2		16.8	76						
	58.3	25.0	17	07.5	67						
17	00.7	25.0		11.3	65						
	59.7	23.8	18	11.8	57						
18	02.3	23.7		15.9	59						
	58.5	24.9	19	08.0	65						
19	00.9	25.0		12.5	67						

No. 64. Kamogawa (鴨 川)

Lat.=35° 05' 45" N., Long.=140° 06' 17" E.

Height=4 m

Sept. 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
8	12 24.5	6 8.0
	27.2	8.1
	59.3	7.1
	13 01.2	6.9
	14 00.6	5.5
	02.4	5.5
	58.9	4.5
	15 00.6	4.5
	59.3	4.1
	16 00.9	4.1
	17 01.7	4.3
	03.7	4.3
	57.1	4.4
	59.2	4.3
	19 12.1	4.3
	14.0	4.3
	20 08.6	4.3
	09.9	4.3
	21 01.5	4.1
	04.2	3.9
	22 01.6	4.3
	03.8	4.3
	58.9	3.6
9	23 00.3	3.8
	0 01.4	3.6
	03.7	3.7
	1 00.0	4.3
	02.0	4.3
	2 00.3	2.8
	02.1	2.8
	59.1	4.2
	3 01.1	4.0
	58.1	3.2
	4 00.0	3.2
	58.5	4.0
	5 00.5	3.9
	6 04.1	2.5
	05.9	2.5
	59.1	2.6
	7 00.8	2.6
	58.3	2.6
	8 00.1	2.6
	59.1	4.3
	9 02.1	4.3
	57.7	5.9
	59.6	6.2
	10 58.5	7.1
	11 00.2	7.2
	12 01.1	8.2
	03.1	8.2

Date	Time	H
	h m	r
8	12 41.6	30558
	44.5	58
	13 11.6	59
	15.1	60
	14 12.2	70
	16.6	70
	15 15.1	71
	18.3	71
	16 07.1	63
	10.2	63
	17 14.8	61
	18.2	60
	18 08.5	58
	11.8	58
	19 22.1	55
	25.8	55
	20 17.9	57
	21.0	57
	21 14.6	57
	17.8	57
	22 13.0	66
	17.0	66
	23 11.9	66
	16.0	65
9	0 11.5	64
	15.4	64
	1 12.1	63
	16.4	63
	2 12.3	58
	15.9	58
	3 10.3	68
	14.2	68
	4 12.6	53
	16.6	51
	21.4	51
	5 13.3	53
	17.5	53
	6 14.3	55
	17.6	55
	7 09.3	41
	12.3	41
	8 10.7	35
	13.9	34
	9 11.2	41
	15.5	41
	10 10.6	48
	14.7	49
	11 07.1	63
	10.2	63
	12 11.8	60
	14.8	60

Date	Time	θ
	h m	° '
8	17 39.2	47 43.6
	41.9	43.5
	23 32.1	46.6
9	34.4	46.5
	5 37.6	43.0
	41.5	43.1
	11 36.6	46.6
	41.0	46.6

No. 65. Sasayama (篠 山)

Lat.=35° 04' 09" N., Long.=135° 13' 16" E.

Height=200 m

Aug. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Declination

Horizontal Intensity

Date	Time	δ
28	h m 7 58.3	° ' 6 24.4
	8 00.9	24.4
	59.4	25.6
	9 01.7	25.4
	58.7	28.7
	10 01.2	28.9
	11 00.8	31.1
	03.3	31.1
	12 00.2	31.3
	02.4	31.3
	13 01.1	31.4
	03.6	31.3
	57.0	31.1
	59.8	31.4
	15 04.5	31.0
	06.9	31.0
	59.9	30.8
	16 02.4	30.6
	58.5	30.4
	17 02.4	30.2
	18 06.6	32.3
	08.5	32.3
	19 01.1	30.6
	03.4	30.6
	58.9	29.6
	20 01.8	29.6
	58.0	30.4
	21 00.5	30.4
	58.8	29.5
	22 00.8	29.5
	56.9	28.7
	59.7	28.7
29	23 58.4	28.2
	0 00.9	28.3
	57.0	27.3
	59.6	27.3
	2 09.4	26.1
	11.6	26.2
	57.6	25.8
	3 00.4	25.8
	58.6	25.8
	4 01.2	25.8
	5 02.7	25.4
	05.4	25.3
	6 05.7	23.6
	07.7	23.6
	56.5	23.8
	58.9	23.9
	7 58.5	25.0
	8 00.7	25.1
	9 00.1	26.9
	02.4	27.0
	10 01.5	28.4
	03.7	28.4

Date	Time	δ
29	h m 10 56.9	° ' 6 31.6
	59.3	31.7
	12 06.3	33.0
	07.9	33.0
	59.7	32.3
	13 02.3	32.4
	58.6	30.2
	14 00.7	30.1
	58.9	28.7
	15 01.2	28.7
	59.3	27.4
	16 01.5	27.3
	17 01.6	27.1
	06.5	27.2
	18 02.0	27.3
	04.4	27.3
	58.8	27.2
	19 00.7	27.1
	58.1	27.5
	20 01.2	27.5
	58.5	27.5
	21 00.9	27.6
	22 02.8	27.6
	05.4	27.6
30	23 04.4	27.3
	07.1	27.3
	59.8	27.0
	0 02.7	27.0

Date	Time	H
28	h m 8 16.3	° 31065
	21.4	65
	9 09.6	61
	13.9	61
	10 09.4	68
	13.3	69
	11 11.0	77
	15.7	77
	12 10.2	93
	14.9	111
	13 12.5	091
	16.4	92
	14 08.2	72
	11.6	73
	27.5	62
	34.0	63
	53.5	56
	57.5	53
	15 13.7	47
	17.5	48
	16 12.0	17
	16.6	12
	17 10.3	11
	33.2	03
	36.6	04
	18 16.5	30998
	22.6	99
	19 11.2	31009
	15.3	10
	20 10.8	17
	16.7	16
	21 07.5	23
	11.8	24
	22 08.2	27
	12.1	28
29	23 08.9	32
	12.9	32
	0 08.7	35
	12.9	36
	1 07.4	43
	11.5	44
	2 20.5	49
	24.8	51
	3 09.3	51
	13.2	51
	4 08.7	51
	12.5	53
	5 14.1	56
	18.9	53
	6 14.9	56
	19.3	57
	7 05.8	48
	09.9	50
	8 07.7	51

Horizontal Intensity

Date	Time	H
29	h m	r
	8 12.0	31051
	9 22.6	65
	27.0	66
	10 09.1	71
	13.1	69
	11 07.0	56
	11.0	56
	12 16.5	66
	20.8	66
	13 10.0	72
	13.8	73
	14 07.5	76
	11.6	75
	15 08.3	72
	12.8	72
	16 09.9	68
	13.9	68
	17 13.8	63
	17.8	63
	18 12.4	56
	16.7	56
	19 07.7	61
	11.3	62
	20 08.1	59
	13.3	59
	21 08.5	58
	14.0	58
	22 12.6	64
	18.2	61
	23 15.4	62
	20.3	62
30	0 10.6	60
	14.6	59

Dip

Date	Time	θ
28	h m	° '
	11 36.5	48 35.2
	40.2	35.2
	17 47.2	38.7
	51.0	38.8
29	23 23.8	38.4
	27.5	38.5
	5 43.4	37.2
	47.6	37.2
	11 36.0	36.2
	40.3	36.4
	17 41.6	36.4
	46.2	36.4
	23 32.8	37.0
	36.5	36.8

No. 66. Hamada (浜 田)

Lat.=34° 53' 51" N., Long.=132° 05' 56" E.

Height=8 m

Sept. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
25	17 33.1	6 34.5
	35.8	34.6
	58.1	34.7
	18 00.4	34.7
	19 08.1	34.7
	10.7	34.7
	20 25.1	34.6
	27.6	34.6
	58.5	34.8
	21 01.2	34.7
	22 01.3	34.7
	04.0	34.8
	58.5	34.7
	23 01.1	34.6
	59.4	34.5
	26 0 01.2	34.5
	1 10.6	34.3
	13.2	34.3
	2 08.0	34.5
	11.3	34.5
	3 06.4	34.5
26	09.2	34.5
	4 09.4	34.1
	16.2	33.5
	5 10.2	33.7
	14.5	33.5
	6 07.2	34.9
	13.3	34.8
	58.4	34.0
	7 00.7	33.4
	8 06.1	32.1
	13.0	32.1
	9 00.4	31.7
	02.2	31.8
	58.4	33.5
	10 00.0	33.5
	53.4	34.1
	55.2	34.2
	11 57.6	36.6
	12 00.1	36.6
	58.5	37.7
	13 00.0	37.9
	57.5	37.7
	14 00.1	37.7
	58.6	36.7
	15 00.5	36.6
	59.0	35.2
	16 01.3	35.1
	57.7	34.3
	59.8	34.3
	17 58.5	34.3
	18 00.5	34.3
	57.6	34.4
	19 00.0	34.4

Date	Time	H
	h m	r
25	18 09.7	31544
	13.5	44
	19 19.1	44
	23.7	45
	20 40.8	42
	45.2	41
	21 09.8	44
	13.9	45
	22 12.9	44
	17.1	44
	23 09.5	46
	13.5	46
	26 0 08.7	44
	12.2	42
	1 24.9	46
	28.1	46
	2 16.4	45
	19.2	45
	3 26.4	46
	31.0	46
	4 27.1	51
	33.5	53
26	5 22.5	52
	25.4	51
	6 24.2	55
	28.2	54
	7 09.1	54
	14.0	54
	8 35.0	41
	38.3	43
	9 07.3	35
	10.2	35
	10 07.4	21
	10.9	19
	11 01.5	14
	04.6	22
	12 05.5	34
	09.4	31
	13 06.1	45
	10.4	46
	14 07.3	56
	11.1	55
	15 08.4	52
	12.4	53
	16 19.1	52
	22.2	52
	17 07.6	51
	11.0	50
	18 09.2	50
	12.8	51
	19 07.3	46
	10.7	46

Date	Time	θ
	h m	° '
25	23 26.1	49 14.0
	30.7	14.0
26	5 45.1	14.2
	47.9	13.5
	11 19.5	14.3
	23.0	14.3
	17 34.3	13.1
	37.8	13.1

No. 67. Himezi (姫 路)

Lat.=34° 52' 12" N., Long.=134° 39' 09" E.

Height=50 m

Sept. 1955

Inst. No. 21C Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
14	h m 0 58.4	° ' " 6 16.4
	1 00.7	16.4
	54.1	16.7
	56.2	16.6
	3 22.2	16.5
	25.7	16.5
	56.0	16.9
	58.3	16.9
	4 53.6	16.9
	57.0	16.8
	6 06.5	16.7
	10.7	16.6
	7 00.4	16.5
	05.7	16.4
	8 01.0	16.8
	06.2	17.0
	57.7	17.8
	9 04.0	17.9
	59.2	19.4
	10 02.6	19.6
	11 03.3	* 21.5
	06.9	21.5
	55.5	22.0
	59.7	22.0
	13 22.9	21.3
	27.1	21.3
	55.6	20.9
	59.9	21.0
	15 02.8	19.6
	06.8	19.5
	58.4	19.3
	16 01.7	19.2
	54.1	18.9
	57.8	18.8
	18 05.6	18.3
	09.0	18.2
	46.5	18.8
	49.7	18.9
	20 05.2	17.4
	08.9	17.7
	59.7	19.2
	21 04.7	19.1
	56.6	19.5
	59.8	19.3
	22 54.0	19.5
	58.0	19.5
	23 59.1	19.2
	0 02.3	19.3
	1 17.2	18.9
	20.4	18.9
	2 01.6	18.6
	04.1	** 18.6

Date	Time	H
14	h m 1 29.7	γ 31257
	36.9	56
	2 05.9	53
	10.1	53
	3 35.3	57
	39.3	57
	4 06.1	58
	12.7	58
	5 04.0	57
	08.6	56
	6 24.6	55
	28.6	56
	7 16.7	52
	22.4	51
	8 16.8	49
	22.4	48
	9 17.2	44
	22.6	44
	10 14.0	48
	19.2	47
	11 39.5	* 49
	44.1	51
	12 21.3	56
	29.8	54
	13 42.2	64
	45.9	62
	14 10.4	63
	26.9	64
	16 13.2	46
	21.2	46
	17 17.0	31
	20.4	30
	18 18.4	39
	23.7	40
	19 16.2	31
	24.1	29
	20 19.7	50
	27.8	46
	21 19.0	35
	23.4	35
	22 08.4	39
	12.9	39
	23 08.3	40
	13.2	41
	15 0 11.9	45
	22.6	45
	1 29.9	45
	35.9	44
	2 15.9	45
	31.2	** 45

Date	Time	θ
14	h m 5 31.3	° ' " 48 26.7
	37.8	26.5
	12 41.5	24.7
	44.6	25.4
	17 34.8	26.0
	40.9	26.2
	23 31.8	25.9
	37.9	25.4

* ~ ** Coil 29 B

* ~ ** Coil 29 B

No. 68. Miyosi (三 次)

Lat.=34° 48' 22" N., Long.=132° 51' 30" E.

Height=160 m

Sept. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	^h ^m	[°] [']
21	9 02.9	6 31.6
	05.6	31.6
	59.2	32.6
	10 01.4	32.7
	59.3	34.9
	11 01.6	35.0
	57.8	36.1
	59.7	36.1
	12 56.7	40.2
	58.6	40.2
	13 58.2	38.8
	14 00.0	38.8
	57.5	37.2
	59.6	37.1
	15 57.7	35.8
	59.5	35.7
	16 58.6	36.3
	17 00.9	36.3
	18 03.5	36.5
	05.3	36.6
	19 06.9	34.8
	09.0	34.7
	20 00.2	34.3
	02.6	34.3
	58.5	33.8
	21 01.0	33.7
	58.5	33.7
	22 01.2	33.7
	58.0	33.7
	23 00.0	33.7
	57.8	33.6
22	0 00.0	33.6
	57.7	33.7
	1 00.3	33.7
	58.0	33.5
	2 00.6	33.5
	58.1	33.3
	3 01.0	33.3
	55.9	33.1
	58.5	33.2
	4 58.2	32.8
	5 01.3	32.7
	57.7	32.7
	59.9	32.7
	6 58.3	31.9
	7 00.0	31.9
	8 00.8	30.9
	03.8	30.8
	58.1	30.9
	9 00.2	30.9
	58.6	32.3
	10 00.9	32.4
	57.0	34.5
	59.6	34.7
	11 57.3	37.2
	59.5	37.2
	12 57.5	37.7
	59.9	37.7

Date	Time	H
	^h ^m	^r
21	9 12.3	31302
	16.3	00
	10 08.0	293
	11.9	93
	11 08.3	91
	12.5	90
	12 05.2	305
	10.8	27
	10.5	08
	19.7	09
	13 04.9	21
	08.5	21
	14 06.3	28
	09.8	29
	15 06.4	30
	09.9	31
	16 06.3	29
	10.1	28
	17 07.8	17
	12.6	17
	18 11.5	10
	16.0	07
	19 15.7	10
	20.3	11
	20 09.8	14
	14.0	12
	21 08.1	16
	13.3	15
	22 08.2	14
	14.3	14
	23 06.8	13
22	11.1	13
	0 07.0	15
	10.7	13
	1 07.9	11
	12.6	10
	2 08.2	13
	13.2	13
	3 09.8	14
	14.1	14
	4 06.7	17
	11.8	18
	5 09.2	16
	12.8	16
	6 14.1	25
	18.2	24
	7 08.0	21
	13.1	20
	8 11.6	13
	17.1	11
	9 06.9	05
	11.0	04
	10 07.7	290
	11.5	88
	11 10.2	77
	14.5	79
	12 06.1	95
	09.3	98
	13 06.7	307
	10.3	08

Date	Time	θ
	^h ^m	[°] [']
21	11 32.4	48 45.7
	36.2	45.5
	17 32.8	45.5
	36.6	45.4
22	23 22.0	45.8
	28.2	46.1
	5 25.0	46.5
	29.9	46.5
	11 35.8	46.7
	38.2	46.6

No. 69. Takahasi (高 梁)

Lat.=34° 47' 08" N., Long.=133° 36' 30" E.

Height=56 m

Sept. 1955

Inst. No. 21C Coil 29B Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ	Date	Time	H	Date	Time	θ
17	h m 7 28.1	° ' 6 17.6	17	h m 7 42.7	r 31388	17	h m 11 38.8	° ' 48 26.1
	h m 30.6	° ' 17.7		h m 47.9	r 88		h m 44.8	° ' 26.0
	h m 55.2	° ' 18.2		h m 8 05.3	r 89		h m 30.3	° ' 26.3
	h m 57.8	° ' 18.1		h m 09.0	r 88		h m 34.1	° ' 26.3
	h m 9 20.2	° ' 20.3		h m 10 45.2	r 77	23	h m 23.2	° ' 28.9
	h m 23.1	° ' 20.4		h m 49.6	r 80		h m 29.9	° ' 29.4
	h m 10 03.0	° ' 20.9		h m 11 17.4	r 86		h m 29.7	° ' 26.6
	h m 05.9	° ' 21.0		h m 12 36.1	r 88		h m 34.3	° ' 27.1
	h m 58.1	° ' 22.5		h m 49.4	r 90	18		
	h m 11 01.0	° ' 22.5		h m 15 20.5	r 78			
	h m 12 12.4	° ' 23.1		h m 24.9	r 75			
	h m 15.4	° ' 23.1		h m 16 12.3	r 65			
	h m 13 08.3	° ' 23.4		h m 16.9	r 61			
	h m 15.2	° ' 23.2		h m 52.1	r 63			
	h m 14 01.5	° ' 23.0		h m 55.6	r 64			
	h m 07.2	° ' 23.0		h m 17 16.6	r 63			
	h m 15 07.8	° ' 22.3		h m 20.0	r 61			
	h m 11.6	° ' 22.3		h m 18 58.6	r 75			
	h m 59.9	° ' 21.3		h m 19 01.5	r 76			
	h m 16 03.4	° ' 21.1		h m 22.6	r 75			
	h m 17 05.6	° ' 20.5		h m 26.0	r 75			
	h m 09.4	° ' 20.5		h m 20 27.0	r 80			
	h m 18 44.4	° ' 20.5		h m 43.2	r 81			
	h m 47.5	° ' 20.5		h m 21 10.5	r 75			
	h m 19 10.4	° ' 20.6		h m 14.8	r 72			
	h m 15.3	° ' 20.6		h m 22 11.6	r 70			
	h m 20 17.6	° ' 20.0		h m 13.2	r 68			
	h m 19.9	° ' 19.9		h m 23 07.1	r 78			
	h m 55.7	° ' 19.4		h m 10.2	r 80			
	h m 21 03.0	° ' 19.4	18	h m 0 20.2	r 88			
	h m 55.6	° ' 21.3		h m 24.2	r 89			
	h m 58.2	° ' 21.5		h m 1 19.4	r 87			
	h m 22 58.8	° ' 20.8		h m 22.9	r 86			
	h m 23 00.3	° ' 20.7		h m 2 07.0	r 89			
18	h m 0 08.6	° ' 20.8		h m 13.7	r 91			
	h m 10.9	° ' 20.7		h m 3 22.2	r 96			
	h m 1 11.2	° ' 20.4		h m 39.7	r 88			
	h m 13.4	° ' 20.4		h m 4 26.0	r 85			
	h m 59.1	° ' 20.3		h m 30.2	r 85			
	h m 2 01.3	° ' 20.3		h m 5 07.2	r 92			
	h m 3 07.9	° ' 20.2		h m 11.3	r 92			
	h m 11.2	° ' 20.1		h m 6 14.3	r 92			
	h m 4 13.0	° ' 20.2		h m 17.7	r 93			
	h m 17.1	° ' 20.2		h m 7 13.4	r 90			
	h m 56.2	° ' 20.7		h m 17.4	r 90			
	h m 59.9	° ' 20.6		h m 8 14.4	r 83			
	h m 5 59.3	° ' 21.0		h m 17.4	r 83			
	h m 6 04.5	° ' 20.7		h m 9 04.2	r 75			
	h m 7 03.4	° ' 20.2		h m 09.0	r 72			
	h m 06.6	° ' 20.2		h m 10 24.0	r 70			
	h m 8 01.7	° ' 19.4		h m 27.3	r 69			
	h m 07.7	° ' 19.4						
	h m 51.7	° ' 19.3						
	h m 54.1	° ' 19.3						
	h m 10 12.4	° ' 20.9						
	h m 17.0	° ' 20.9						

No. 70. Senzu (泉 津)

Lat.=34° 46' 31" N., Long.=139° 25' 29" E.

Height=45 m

Sept. 1954

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
29	h m 16 53.6	° ' 5 14.7
	57.6	15.0
	17 58.5	15.0
	18 00.8	15.0
	19 22.0	15.0
	25.7	15.3
	20 11.6	14.7
	14.8	14.8
	21 01.5	14.7
	04.1	14.7
	22 00.1	14.3
	03.7	14.1
	58.4	14.0
	23 02.2	13.9
30	0 01.3	14.0
	11.5	14.1
	58.7	14.4
	1 07.7	14.4
	2 04.5	16.0
	07.1	16.1
	59.4	14.3
	3 02.0	14.2
	4 00.8	13.7
	03.3	13.6
	5 02.3	15.1
	05.4	15.3
	58.2	17.3
	6 00.8	17.4
	56.4	14.6
	7 01.8	14.9
	8 02.4	15.2
	05.6	15.3
	59.8	14.5
	9 03.3	14.3
	10 10.8	17.5
	15.7	17.3
	58.1	18.4
	11 00.6	18.6
	12 05.6	19.2
	10.5	19.0
	13 15.2	19.0
	20.7	19.1
	14 10.4	18.5
	15.4	18.5
	15 04.5	17.7
	10.1	17.6
	16 02.9	16.2
	06.3	16.3
	17 01.8	15.8
	05.5	15.8
	56.2	15.8
	58.6	15.9
	20 08.1	15.1
	10.4	15.1

Date	Time	H
29	h m 17 30.3	r 30584
	39.6	84
	18 06.4	76
	09.9	75
	19 34.9	62
	39.3	60
	20 27.1	60
	32.6	60
	21 11.7	76
	16.9	78
	22 21.4	80
	26.6	80
	23 11.0	80
	14.9	80
30	0 34.5	79
	42.5	80
	1 24.1	81
	30.0	82
	2 13.8	87
	17.6	89
	3 08.7	96
	12.9	98
	4 09.2	89
	12.9	89
	5 11.1	78
	14.4	78
	6 06.9	600
	13.1	06
	7 09.8	591
	14.8	88
	8 12.6	61
	16.2	61
	9 13.8	61
	18.2	63
	10 22.3	74
	33.5	71
	11 08.1	70
	14.1	70
12	22 22.3	81
	28.0	78
	13 43.6	67
	48.4	68
	14 27.5	60
	32.3	61
	15 20.8	53
	24.8	51
	16 16.8	50
	20.8	50
17	17 17.5	47
	21.7	47
	18 05.9	47
	09.2	46
	20 15.7	66
	19.2	68

Date	Time	θ
29	h m 23 35.6	° ' 48 20.2
	39.4	20.4
30	5 23.7	20.3
	26.8	20.2
	11 24.1	19.9
	27.3	20.0
	17 33.0	21.9
	37.8	21.6

No. 71. Iga Ueno (伊賀上野)

Lat.=34° 46' 02" N., Long.=136° 07' 38" E.

Height=170 m

Aug. 1955

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
16	h m 8 18.9	° ' 6 12.1
	23.0	12.2
	57.7	12.9
	9 04.0	12.9
	58.5	14.6
	10 02.7	14.7
	11 02.1	16.8
	06.5	17.0
	12 12.2	17.4
	15.7	17.3
	52.7	17.5
	58.3	17.6
	13 57.2	17.3
	14 00.4	17.7
	55.7	16.6
	58.3	16.6
	16 00.3	15.2
	04.5	15.2
	16 58.9	13.5
	17 01.9	13.7
	18 13.1	13.4
	37.5	13.7
	40.0	13.6
	19 01.2	13.6
	05.9	13.8
	20 11.9	13.9
	15.8	13.6
	21 07.7	13.5
	10.9	13.6
	22 04.5	13.3
	07.1	13.3
	23 00.2	13.5
	03.4	13.5
17	0 05.1	13.4
	08.4	13.3
	1 11.8	13.1
	15.9	13.0
	2 00.8	13.0
	03.5	12.9
	4 07.1	12.6
	09.6	12.6
	5 03.7	12.2
	06.8	12.0
	59.7	11.1
	6 03.1	11.1
	7 03.1	10.0
	06.8	10.2
	8 03.8	10.6
	06.9	10.6
	9 11.4	12.4
	14.7	12.5

Date	Time	H
16	h m 8 46.6	r 31077
	51.4	77
	9 13.7	80
	18.4	79
	10 10.8	89
	14.7	89
	11 12.1	102
	15.7	03
	12 21.7	10
	26.7	09
	13 10.1	09
	16.1	11
	14 19.8	18
	36.7	16
	15 06.3	05
	13.8	01
	16 15.7	096
	19.1	98
	17 08.4	103
	13.1	01
	18 28.8	01
	32.5	099
	19 16.6	105
	22.9	03
	20 22.7	01
	28.1	01
	21 20.5	02
	24.2	099
	22 15.5	101
	22.8	099
	23 11.7	99
	22.0	99
17	0 15.9	101
	19.9	01
	1 23.4	04
	27.6	04
	2 11.5	05
	15.9	05
	4 17.9	09
	21.8	09
	5 14.3	03
	18.0	04
	6 10.8	01
	14.1	01
	7 14.7	096
	20.6	98
	8 18.3	93
	24.2	93
	9 22.0	104
	28.0	04

Date	Time	θ
16	h m 11 29.9	° ' 48 3.5
	35.9	3.3
	17 28.6	4.6
	33.9	5.3
	23 35.8	4.1
17	39.1	4.1
	5 29.3	5.6
	32.7	6.9

No. 72. Motomura (元 村)

Lat.=34° 44' 41" N., Long.=139° 21' 52" E.

Height=50 m

Oct. 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
8	^h ^m	[°] [']
	10 03.7	5 50.9
	06.9	50.9
	58.5	52.4
	11 01.1	52.5
	12 00.5	53.8
	03.0	54.0
	13 00.5	53.6
	03.1	53.7
	58.9	52.9
	14 01.9	52.9
	59.7	52.1
	15 02.0	52.0
	59.8	51.3
	16 04.4	51.1
	59.8	50.5
	17 04.1	50.6
	58.5	51.0
	18 03.7	50.7
	58.0	51.0
	19 01.2	51.2
	20 01.1	51.0
	03.8	51.1
	21 00.7	51.0
	02.9	51.0
	56.8	49.9
	59.6	49.8
	22 57.1	50.3
	59.9	50.3
	23 58.9	49.9
9	0 01.9	49.9
	1 00.3	50.6
	04.6	50.9
	2 01.9	50.7
	06.6	50.7
	58.7	50.2
	3 02.1	50.0
	58.8	51.2
	4 01.5	51.4
	59.8	50.4
	5 02.7	50.4
	6 00.0	50.7
	03.0	50.7
	7 02.4	49.6
	04.9	49.8
	59.8	49.4
	8 03.0	49.4
	9 03.2	49.8
	06.5	49.9
	10 01.7	52.3
	05.6	52.3
	11 04.9	54.2
	08.0	54.4

Date	Time	H
8	^h ^m	^r
	10 13.2	31733
	16.3	34
	11 07.2	53
	10.5	51
	12 08.2	64
	10.9	65
	13 09.1	64
	12.5	64
	14 09.1	62
	13.6	62
	15 08.1	59
	12.6	58
	16 22.6	55
	26.3	51
	17 12.5	53
	17.0	53
	18 11.4	54
	14.7	53
	19 11.0	53
	15.8	56
	20 09.9	53
	13.3	53
	21 08.6	52
	11.2	50
	22 06.8	48
	11.0	49
	23 06.7	45
	10.4	44
9	0 09.0	39
	14.0	37
	1 12.9	50
	16.6	49
	2 15.4	54
	19.1	53
	3 11.9	57
	15.6	59
	4 07.9	64
	11.0	62
	5 09.6	62
	13.1	64
	6 09.5	61
	12.2	61
	7 10.7	58
	14.2	56
	8 09.3	37
	12.9	37
	9 12.8	28
	16.4	29
	10 12.8	42
	16.6	43
	11 14.8	63
	18.9	64

Date	Time	θ
8	^h ^m	[°] [']
	11 22.9	47 59.3
	25.5	59.0
	17 27.7	59.8
	34.0	59.9
9	23 23.4	48 00.7
	27.8	01.0
	5 23.2	00.2
	27.0	00.2

No. 73. Utumi (内 海)

Lat.=34° 44' 18" N., Long.=137° 58' 54" E.

Height=10 m

Aug. 1955

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination			Horizontal Intensity			Dip		
Date	Time		δ	Date	Time		H	
	h	m	° ' "		h	m	r	
9	10	19.2	6 13.6	9	10	36.3	31001	9
		22.7	13.7			42.6	01	
		57.3	14.7		11	11.0	03	
	11	01.2	14.8			16.2	03	
		56.3	15.2		12	11.7	05	
	12	00.0	15.0			16.2	06	
		56.9	14.7		13	12.4	07	
		59.6	14.7			17.3	06	
	13	56.5	14.3		14	24.5	16	
	14	03.5	14.2			32.1	09	
	15	02.1	12.8		15	28.5	11	10
		10.5	12.7			37.8	13	
		49.7	12.0		16	37.0	30996	
		54.1	12.0			42.4	31008	
	16	55.3	11.3			49.7	30992	
		58.5	11.1		17	20.7	91	
	18	16.0	10.9			25.9	90	
		20.6	10.9		18	27.7	91	
	19	09.5	10.6			31.5	90	
		12.1	10.6		19	21.5	88	
		49.9	10.9			25.6	88	
		53.6	11.1		20	18.2	93	
	21	14.0	10.5			22.9	90	
		16.7	10.5		21	27.4	95	
		58.8	10.5			35.3	95	
	22	01.1	10.5		22	10.7	96	
		56.4	10.7			21.4	97	
		59.1	10.7		23	12.4	95	
10	0	00.8	10.2	10		18.4	94	
		03.5	10.2		0	15.6	96	
		56.0	10.2			20.1	96	
	2	02.1	10.2		1	07.5	96	
		05.8	10.1			12.0	96	
		00.1	9.9		2	17.4	89	
	3	02.8	9.9			22.7	92	
		56.9	9.3		3	10.2	95	
		59.5	9.3			16.2	98	
	4	59.1	9.8		4	06.1	96	
		01.8	9.8			10.7	96	
		07.1	8.1		5	09.9	96	
	6	09.8	8.0			14.1	96	
		58.6	7.6		6	25.4	98	
		01.0	7.7			30.9	97	
	7	04.0	7.8		7	08.0	91	
		08.2	7.8			11.8	91	
		58.2	8.4		8	19.2	84	
	9	00.8	8.5			27.2	85	
		56.6	9.2		9	08.9	81	
		59.5	9.5			14.5	79	
	10	56.4	10.9		10	07.0	71	
		58.9	10.9			16.0	71	
		56.9	12.0		11	09.8	71	
	12	00.1	12.1			15.0	71	
		59.5	14.2		12	07.3	78	
		01.9	14.3			13.2	78	
	13	57.6	14.3		13	11.9	88	
		01.0	14.3			16.3	88	
			14.3		14	06.8	94	
	14	01.0	14.3			10.4	94	

No. 74. Mabusi (間 伏)

Lat.=34° 41' 24" N., Long.=139° 23' 18" E.

Height=20 m

Oct. 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 1

Declination			Horizontal Intensity			Dip						
Date	Time		δ	Date	Time		H	Date	Time		θ	
5	h	m	°	5	h	m	r	5	h	m	°	
	9	13.6	5		9	23.6	31593		11	37.9	46	
		15.9				27.3	96			42.8		
	10	00.2	13.0		10	16.5	609		17	16.1	39.6	
		02.1	12.9			23.9	09			19.0	39.4	
		58.1	13.9		12	15.2	27		23	30.2	39.2	
	11	00.2	14.0			20.0	34			34.0	39.0	
	12	06.1	14.7			25.9	33		6	5	26.5	39.3
		08.4	15.3		13	19.4	34				30.7	39.2
		56.0	15.1			26.4	34					
	13	02.5	14.8		14	12.9	32					
	14	00.3	13.8			17.0	30					
		04.1	13.7		15	09.3	23					
		59.0	12.7			13.2	23					
	15	02.3	12.8		16	18.2	21					
		58.5	11.8			20.9	19					
	16	01.9	11.7		17	04.7	13					
		56.7	11.4			08.1	16					
		58.9	11.6		18	18.4	16					
	18	11.9	11.5			21.5	15					
		13.5	11.4		19	09.0	17					
		57.3	11.0			12.7	20					
	19	00.4	11.0		20	08.2	20					
		58.6	11.3			12.3	19					
	20	01.7	11.3		21	08.7	18					
		58.5	11.1			12.1	17					
	21	01.6	11.1		22	11.0	20					
		59.4	11.0			14.7	21					
	22	02.3	11.0		23	13.0	24					
		59.3	10.9			16.5	24					
	23	03.8	10.7		6	0	13.9		22			
6	0	01.4	10.8			18.5	23					
		05.1	10.7	1		12.7	21					
	1	03.3	10.7			15.8	21					
		05.5	10.6	2		09.0	26					
		59.8	11.6			12.7	29					
	2	02.5	11.6	3		07.6	27					
		58.1	10.1			10.4	27					
	3	01.0	10.0	4		09.2	25					
		58.0	10.2			14.0	28					
	4	01.4	10.3	5		07.2	21					
		56.2	10.6			12.1	21					
		59.3	10.6	6		06.1	30					
	5	56.1	11.0			09.6	30					
		58.6	11.0	7		09.7	26					
	6	58.1	11.0			13.7	24					
	7	01.5	11.0	8		15.7	25					
	8	04.5	10.6			19.7	24					
		08.0	10.8	9		07.6	21					
		56.0	10.6			11.7	20					
		59.8	10.6	10		11.5	23					
	10	02.0	11.1			14.4	25					
		05.5	11.1	11		04.5	24					
		56.7	11.9			07.1	25					
		58.7	12.0									

No. 75. Habu (波 浮)

Lat.=34° 41' 11" N., Long.=139° 26' 29" E.

Height=45 m

Oct. 1954

Inst. No. 21 Coil 21A Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
2	h m 9 19.8	° ' 8 00.4
	24.5	00.4
	10 07.2	01.5
	11.2	01.8
	59.6	03.3
	11 03.8	03.4
	12 02.9	04.0
	05.1	04.0
	13 03.3	04.6
	06.8	04.5
	14 03.4	03.0
	07.1	03.2
	15 01.3	02.3
	04.9	02.0
	16 01.8	00.9
	04.8	00.9
	17 03.5	00.6
	05.8	00.8
	59.1	01.0
	18 01.5	01.0
	19 00.3	01.0
	02.6	01.0
	59.8	01.1
	20 02.7	01.0
	59.2	01.0
	21 01.9	00.9
	22 01.6	00.3
	05.9	00.6
	23 01.6	00.6
	05.1	00.6
3	0 13.4	00.4
	17.5	00.3
	59.6	00.4
	1 01.8	00.4
	2 01.4	00.1
	03.7	00.1
	3 00.1	00.0
	02.3	00.1
	58.3	7 59.9
	4 01.5	59.9
	59.9	8 00.0
	5 03.1	00.1
	6 07.3	7 59.8
	09.3	59.8
	58.4	59.8
	7 00.7	59.7
	8 03.8	59.1
	06.9	59.1
	9 01.2	58.7
	05.1	58.8
	10 00.7	8 00.0
	02.8	00.3

Date	Time	H
2	h m 9 36.0	r 31198
	41.4	200
	10 20.8	04
	24.6	08
	11 15.3	10
	20.2	13
	12 11.7	30
	14.5	30
	13 17.9	29
	24.5	32
	14 20.2	19
	23.9	19
	15 15.4	27
	21.5	29
	16 12.6	34
	16.8	33
	17 12.1	29
	15.4	30
	18 07.3	28
	11.0	28
	19 13.6	32
	19.0	37
	20 08.9	33
	14.8	32
	21 08.7	35
	13.5	33
	22 15.7	31
	19.6	33
	23 20.4	36
	24.5	34
3	0 26.2	36
	29.8	35
	1 08.8	35
	11.4	39
	2 09.2	36
	12.9	35
	3 07.7	33
	11.3	32
	4 10.7	36
	15.6	36
	5 09.7	45
	14.8	44
	6 14.8	41
	18.7	43
	7 07.1	29
	10.4	28
	8 16.4	14
	20.5	12
	9 13.0	193
	16.9	98
	10 08.9	85
	12.6	86

Date	Time	θ
2	h m 11 37.5	° ' 48 14.2
	43.4	14.1
	17 27.4	13.8
	31.2	13.3
	23 38.9	13.6
3	43.6	13.1
	5 32.0	15.1
	38.6	15.1

No. 76. Simoda (下 田)

Lat.=34° 40' 02" N., Long.=138° 56' 44" E.

Height=20 m

Sept. 1954

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time		δ
	h	m	$^{\circ}$ ' "
10	21	15.4	5 42.4
		17.4	42.4
		58.3	42.1
	22	00.9	42.1
	23	00.1	42.5
11		02.4	42.5
	0	10.3	41.6
		12.3	41.5
	1	01.3	41.1
		03.4	41.1
		59.4	41.0
	2	01.9	41.0
	3	10.0	41.1
		11.6	41.0
	5	49.7	40.2
	6	04.8	40.4
		59.0	39.6
	7	01.6	39.5
	8	03.4	40.4
		05.6	40.5
		59.9	42.2
	9	01.9	42.2
		58.8	44.1
	10	00.8	44.2
		58.6	45.1
	11	00.3	45.1
		57.3	45.8
	12	00.0	45.8
	13	00.7	45.1
		02.8	45.1
		59.9	43.1
	14	01.7	43.1
	15	01.2	41.1
		04.2	41.1
	16	01.6	40.7
		03.4	40.7
	17	10.2	40.9
		12.5	41.0
	18	00.1	41.1
		02.2	41.1
	19	03.6	41.7
		05.1	41.7
	20	05.4	41.3
		07.6	41.3
	21	03.5	39.7
		05.9	39.8
		59.7	41.3
	22	01.3	41.3

Date	Time		H
	h	m	r
10	22	28.3	30887
		32.5	87
	23	15.1	89
11		22.3	93
		26.7	95
	0	20.5	89
		23.5	88
	1	29.4	80
		35.8	80
	2	13.7	80
		27.4	79
	6	25.0	80
		29.6	80
	7	13.4	67
		17.2	67
	8	22.2	56
		25.9	55
	9	15.7	63
		21.2	63
	10	13.8	75
		17.2	75
	11	11.6	82
		26.6	82
	12	28.5	90
		32.4	90
13	13	16.4	84
		19.6	84
	14	12.0	75
		15.4	77
		19.3	77
	15	19.0	85
		22.6	84
	16	18.6	68
		21.8	68
	17	18.3	69
		21.5	69
	18	20.8	77
		23.9	76
	20	14.7	68
21		17.8	68
	21	23.5	72
		26.6	72
22		16.3	57
		19.9	57

Date	Time		θ
	h	m	$^{\circ}$ ' "
10	23	51.0	47 18.1
		53.9	18.1
11	11	36.4	20.4
		41.2	20.4
	17	33.1	19.3
		35.4	19.3

No. 77. Hukue (福江)

Lat.=34° 37' 24" N., Long.=137° 05' 46" E.

Height=1 m

Aug. 1955

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ	
	^h ^m	[°]	[']
5	7 32.5	6	3.3
	36.4		3.1
	8 28.0		5.6
	31.1		5.5
	9 04.4		6.6
	08.4		6.5
	10 19.5		8.9
	23.1		9.2
	11 00.0		10.2
	03.8		10.3
	13 03.9		12.2
	07.7		12.2
	14 03.6		11.2
	08.5		10.9
	15 02.4		9.5
	05.4		9.6
	16 11.0		7.7
	16.6		7.3
	17 00.6		6.6
	03.1		6.4
	18 00.0		4.5
	02.3		4.5
	53.0		6.0
	55.6		5.9
	20 00.7		6.6
	02.8		6.5
	21 07.3		5.9
	10.7		6.0
	59.3		7.0
	22 03.0		6.9
	56.2		6.9
	59.9		6.9
	23 59.8		6.9
6	0 03.2		6.9
	1 01.1		6.1
	05.0		6.1
	2 00.8		6.9
	04.1		6.9
	55.3		5.4
	57.9		5.4
	3 58.3		5.9
	4 01.1		5.9
	55.0		5.8
	57.7		5.6
	5 59.4		4.5
	6 03.5		4.5
	59.2		4.3
	7 02.0		4.0
	8 02.1		4.2
	05.4		4.3
	58.3		6.6
	9 00.5		6.8
	59.8		8.4
	10 02.3		8.3

Date	Time	H
	^h ^m	^r
5	8 09.0	31009
	14.9	08
	42.7	09
	50.6	06
	9 22.2	06
	27.5	03
	10 40.1	23
	46.8	26
	11 30.9	38
	35.8	40
	13 21.4	61
	28.4	51
	14 40.1	64
	46.4	65
	15 21.9	69
	31.1	69
	16 33.8	53
	37.8	54
	17 11.9	23
	16.7	31
	18 09.0	36
	14.3	41
	19 04.6	34
	13.3	37
	20 11.0	47
	21 22.2	33
	26.7	30
	22 13.3	45
	18.2	46
	23 10.6	43
	15.5	44
6	0 16.1	42
	20.7	42
	1 14.1	43
	18.5	48
	2 11.8	41
	15.5	36
	3 09.7	42
	15.3	43
	4 09.0	46
	13.0	48
	5 05.0	43
	10.6	41
	6 19.7	48
	24.7	48
	7 12.4	41
	17.3	40
	8 13.6	37
	18.6	33
	9 12.7	36
	18.1	38
	10 15.0	60
	22.4	61

Date	Time	θ	
	^h ^m	[°]	[']
5	11 58.4	47	47.5
	12 09.2		47.1
	17 32.1		49.2
	39.5		48.8
	23 29.8		49.1
6	33.8		48.1
	5 24.5		48.2
	29.7		48.4

No. 78. Omaezaki (御前崎)

Lat.=34° 36' 24" N., Long.=138° 10' 30" E.

Height=30 m

July 1955

Inst. No. 29 Coil 21C Mag. C Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
27	^h 9 ^m 51.7	^o 5 ['] 51.9
		52.3
	10 59.0	52.6
	11 07.3	52.9
	12 16.0	54.1
		55.2
	13 03.7	55.9
		56.0
		52.9
		56.2
		57.0
	14 59.9	55.6
	15 02.7	55.5
		49.9
		54.8
	16 52.5	53.0
		57.8
	19 22.0	53.3
		27.8
	20 03.0	53.3
		06.7
		54.4
		59.2
	21 56.8	52.8
	22 09.8	52.4
	23 11.6	52.3
28		15.8
	1 13.5	52.5
		19.7
	2 21.8	52.0
		32.5
	3 10.3	51.7
		17.1
	4 05.8	52.4
		08.9
		59.0
	5 03.7	51.7
	6 05.4	49.9
		08.4
		57.9
	7 02.6	49.7
	8 03.9	50.0
		08.5
		52.6
		56.1
	9 51.5	53.7
		54.7
	10 05.7	53.6
		09.3
		55.5
		58.3
		55.0

Date	Time	H
27	^h 10 ^m 22.9	^r 30979
		81
	11 24.2	95
		30.6
	12 37.9	81
		79
		45.0
	13 26.6	76
		96
		38.3
	14 13.6	31011
		30996
		19.5
	15 12.8	31002
		30991
		22.1
	16 15.8	98
		91
		20.1
	17 28.1	93
		54
	19 34.1	91
		45.7
	19 51.8	98
		31002
	20 17.9	03
		22.1
	21 13.1	06
		19.5
	22 40.2	04
		49.3
	23 28.1	05
28		02
		34.5
	1 42.7	30998
		84
		52.6
	2 49.0	62
		96
		53.2
	3 34.7	97
		93
		42.8
	4 41.6	31000
		30988
		47.7
	5 14.4	91
		93
	6 18.3	93
		84
		35.5
	7 14.6	85
		74
		19.8
	8 22.0	73
		80
		32.3
	9 11.0	83
		86
		17.4
	10 38.7	81
		93
		45.7
		95

Date	Time	θ
27	^h 11 ^m 51.2	^o 47 ['] 30.6
		56.4
		55.4
		59.7
		30.2
28	23 53.4	31.4
	0 03.6	30.8
	5 35.6	30.0
		39.8
		30.5

No. 79. Miyagawa (宮 川)

Lat.=34° 30' 11" N., Long.=136° 40' 38" E.

Height=10 m

Aug. 1955

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ	
	^h ^m	[°]	[']
21	16 32.2	6	1.0
	35.8		0.8
	17 16.6		0.4
	19.7		0.3
	18 13.1		0.6
	16.1		0.5
	19 01.7		0.9
	04.5		0.9
	20 05.4		1.4
	13.4		1.4
	21 00.5		1.0
	03.5		0.9
	22 05.3		1.9
	10.5		1.9
	23 01.8		1.7
	08.8		1.7
22	0 39.5	5	1.9
	46.1		1.9
	1 18.1		1.9
	24.5		1.9
	2 11.2		1.4
	17.4		1.9
	58.3		1.6
	3 03.1		1.5
	4 02.6		1.4
	07.5		0.5
	59.3		1.1
	5 02.5		1.1
	6 04.0		0.2
	07.4		59.9
	56.9		58.5
	59.9		58.5
	7 59.2		58.9
	8 02.1		58.9
	59.4		0.4
	9 12.6		0.5
	10 03.2		2.6
	08.0		2.5
	57.1		3.8
	11 02.5		4.2
	12 00.8		5.8
	02.9		6.1
	13 04.0		6.3
	06.1		6.2
	14 05.1		5.5
	07.8		5.5
	15 03.2		4.5
	05.4		4.5
	16 00.1		2.5
	03.7		2.6
	58.1		1.3
	17 00.5		1.4

Date	Time	H
	^h ^m	^r
21	17 31.5	31147
	43.2	41
	18 26.0	44
	31.7	44
	19 11.8	42
	16.0	42
	20 27.0	41
	36.6	46
	21 16.4	42
	20.3	39
	22 31.3	43
	41.5	44
	23 24.2	42
	30.0	43
22	0 58.2	43
	1 05.2	42
	34.9	44
	46.3	43
	2 31.2	45
	37.8	45
	3 15.0	47
	20.9	47
	4 16.9	51
	20.1	50
	5 11.7	46
	17.1	47
	6 15.8	39
	20.2	42
	7 26.6	39
	32.6	37
	8 10.5	38
	15.7	42
	9 09.9	32
	13.4	34
	10 14.9	44
	20.4	42
	11 09.2	49
	14.0	52
	12 08.1	52
	12.6	52
	13 10.8	57
	16.4	57
	14 14.4	60
	18.0	63
	15 12.0	60
	16.4	61
	16 12.3	58
	15.7	61
	17 09.1	55
	13.2	51

Date	Time	θ
	^h ^m	[°] [']
21	17 53.5	47 42.6
	57.0	43.3
	23 53.6	43.5
22	57.5	43.9
	5 31.3	41.9
	35.2	41.9
	11 27.8	44.5
	32.4	45.5

No. 80. Hukuyama (福 山)

Lat.=34° 27' 57" N., Long.=133° 23' 04" E.

Height=5 m

Sept. 1955

Inst. No. 21C Coil 29B Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time		δ	
	h	m	°	'
20	15	54.0	6	11.6
		56.6		11.7
	17	05.6		10.4
		11.0		10.1
	18	14.9		11.6
		18.2		11.8
	19	00.0		11.7
		02.5		11.8
	20	05.2		11.3
		08.4		11.3
		57.4		11.4
	21	01.6		11.4
		54.9		11.3
		58.1		11.4
	22	53.0		11.2
		58.6		11.4
21	23	57.0		11.0
	0	00.3		11.0
		58.1		10.9
	1	01.7		10.7
	2	21.0		10.8
		24.6		10.8
	4	28.6		10.7
		32.2		10.6
	5	18.0		10.7
		22.7		10.7
	6	20.9		10.5
		23.6		10.6
		58.3		10.2
	7	01.3		10.1
		59.0		9.6
	8	01.9		9.7
		56.8		10.4
		59.9		10.2
	10	02.3		11.6
		05.6		11.7
		55.5		13.6
		58.7		13.6
	12	02.7		14.7
		05.8		14.9
		57.8		15.6
	13	01.8		15.6
		56.3		14.5
		59.4		14.4
	14	57.5		13.1
	15	00.9		12.8
		59.2		11.6
	16	02.6		11.5

Date	Time		H
	h	m	γ
20	16	20.6	31549
		36.4	50
	17	26.3	34
		32.5	32
	18	29.9	14
		36.8	17
	19	11.4	31
		17.9	33
	20	26.4	44
		30.7	42
	21	26.8	46
		31.3	48
	22	16.5	49
		21.4	49
	23	11.6	48
		15.9	48
21	0	08.3	49
		15.8	47
	2	36.3	45
		40.6	45
	5	01.1	45
		07.9	43
		33.4	49
		38.8	48
	6	29.7	38
		34.9	40
	7	10.3	39
		14.6	39
	8	09.9	34
		16.6	36
	9	40.3	26
		47.8	25
	10	12.7	21
		16.7	22
	11	09.2	25
		13.9	20
	12	14.8	39
		18.4	38
	13	09.3	51
		13.3	52
	14	05.4	60
		08.7	61
	15	07.5	56
		11.7	60

Date	Time		θ	
	h	m	°	'
20	17	49.1	48	5.9
		52.3		5.7
	23	26.5		4.3
21		29.2		4.2
	5	56.5		3.5
	6	02.9		3.3
	11	25.7		4.0
		28.8		4.1

No. 81. Senzaki (仙 崎)

Lat.=34° 22' 54" N., Long.=131° 12' 18" E.

Height=3 m

Sept., Oct. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist 1.

Declination

Date	Time	δ	
	h m	°	'
29	11 58.6	6	4.1
	12 00.7		4.1
	56.0		4.0
	13 02.1		4.0
	14 05.2		2.2
	08.9		2.3
	15 02.3		1.2
	05.3		1.2
	16 01.8		0.3
	03.0		0.4
	58.3		0.2
	17 00.4		0.0
	18 01.6		1.2
	03.1		1.2
	58.1		1.0
	59.6		1.0
	19 58.8		1.3
	20 00.7		1.3
	21 02.8		1.4
	04.8		1.3
	59.7		1.2
	22 02.7		1.2
	58.6		1.0
	23 01.8		1.0
30	0 01.5	5	0.9
	03.8		0.8
	1 00.1		59.6
	04.1		59.6
	2 01.4		58.4
	06.2		58.4
	3 00.9		58.8
	03.7		58.9
	4 03.5		59.7
	07.1		59.8
	59.1		6 0.1
	5 02.2		0.0
	6 15.5		0.4
	18.2		0.4
	58.9		0.4
	7 01.6		0.4
	57.8		1.5
	59.8		1.6
	8 58.0		0.8
	59.7		0.7
	9 58.6		1.9
	10 01.7		1.9
	58.7		3.2
	11 00.5		3.2
	12 02.8		4.0
	04.2		4.0
	59.6		4.1
	13 02.6		4.1
	59.8		4.0
	14 01.8		4.0

Declination

Date	Time	δ	
	h m	°	'
30	15 03.1	6	3.6
	05.1		3.7
	57.9		3.9
	16 00.1		4.1
	57.3		0.3
	59.2		5 59.9
	17 58.5		6 1.7
	18 01.0		1.9
	57.8		3.5
	59.8		3.7
	19 59.7		5 58.1
	20 02.4		57.8
	57.7		6 1.3
	21 00.0		1.4
	58.0		1.1
	22 00.5		1.5
	57.8		1.5
	23 00.3		1.5
	56.3		1.9
	58.6		2.0
1	0 58.9		2.1
	1 01.4		2.1
	58.5		1.4
	2 01.2		1.4
	59.8		2.4
	3 03.8		2.4
	56.4		2.4
	59.3		2.4
	4 59.6		3.1
	5 05.5		3.1
	6 13.2		3.8
	15.1		4.3
	57.8		5.4
	7 01.5		4.2
	14.4		2.7
	16.8		2.7
	58.5		1.9
	8 01.0		1.7
	58.8		3.6
	9 00.8		3.5
	56.8		3.3
	59.1		3.4
	10 58.0		4.3
	11 00.0		4.4
	57.7		5.7
	12 01.1		5.9
	57.4		5.3
	59.6		5.4
	13 59.4		4.5
	14 01.1		4.5

Horizontal Intensity

Date	Time	H
	h m	r
29	12 09.4	31908
	13.0	02
	18.1	12
	21.3	12
	13 09.1	20
	13.5	20
	14 19.2	26
	22.9	26
	15 14.9	24
	18.8	23
	16 08.1	18
	11.7	20
	17 07.8	04
	10.5	06
	18 08.1	897
	10.8	97
	19 05.7	914
	08.4	14
	20 11.0	19
	15.6	20
	21 12.2	27
	16.3	26
	22 10.0	26
	13.0	25
30	23 09.0	28
	13.0	27
	0 21.6	35
	24.4	35
	1 16.1	32
	19.7	32
	2 12.9	22
	15.8	21
	3 18.6	15
	21.3	15
	4 27.4	894
	32.6	93
	5 20.3	54
	24.4	50
	6 27.9	82
	31.8	79
	7 17.2	94
	21.0	93
	8 05.7	92
	09.5	92
	9 07.6	96
	11.1	98
	10 08.6	97
	12.8	99
	11 06.7	910
	09.6	10
	12 12.1	22
	15.4	23
	13 09.6	29
	12.8	29

Horizontal Intensity

Dip

Date	Time	H
30	h m 14 13.0	r 31899
	15.7	901
	31.0	881
	33.9	74
	15 11.2	46
	13.2	46
	25.4	45
	28.0	47
	16 05.8	57
	08.6	57
	17 04.5	45
	07.6	43
	18 07.7	68
	11.0	65
	16.1	63
	19.5	63
	19 09.0	54
	14.4	54
	20 09.4	97
	15.2	93
	21 07.4	49
	11.6	52
	22 07.8	93
	12.5	93
	23 07.7	81
	10.2	82
1	0 05.6	904
	09.1	03
	1 08.2	893
	11.9	96
	2 07.4	95
	10.3	94
	3 09.4	99
	13.5	900
	4 05.6	03
	09.1	899
	5 11.3	907
	14.6	07
	6 21.1	08
	24.0	06
	7 23.4	896
	27.3	96
	8 10.5	93
	14.2	90
	9 05.7	85
	08.4	85
	10 03.8	90
	08.2	91
	11 04.6	904
	07.4	03
	12 08.9	10
	12.1	10
	13 05.7	15
	09.4	18
	14 05.8	24
	07.9	25

Date	Time	θ
29	h m 17 25.2	$^{\circ}$ ' / 48 14.1
	29.4	14.2
	23 45.9	15.0
30	49.4	15.1
	5 38.1	17.0
	41.2	17.1
	11 31.9	16.1
	40.1	15.7
	17 26.2	17.4
	31.9	17.5
	23 24.4	16.6
	28.4	16.6
	1 5 34.2	14.9
1	43.0	15.1
	11 28.0	15.6
	35.0	15.6

No. 82. Sumoto (洲 本)

Lat.=34° 20' 05" N., Long.=134° 54' 33" E.

Height=60 m

Dec. 1955

Inst. No. 21C Coil 21C Mag. C Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ	
	^h ^m	[°]	[']
4	19 11.3	6	8.0
	13.1		8.0
	20 00.0		8.3
	02.3		8.3
	21 07.5		8.0
	10.6		8.0
	59.1		7.9
	22 01.4		7.9
	58.3		8.4
	23 00.7		8.5
5	59.0		8.4
	0 01.4		8.4
	1 01.0		8.4
	03.2		8.4
	57.9		8.8
	2 00.1		8.8
	58.9		8.9
	3 02.2		8.9
	4 29.6		8.2
	32.6		8.4
	5 02.1		8.3
	04.6		8.5
	6 00.2		8.8
	02.3		8.8
	7 04.8		8.7
	07.0		8.8
	8 00.4		8.2
	02.4		8.2
	9 03.3		7.3
	05.2		7.2
	10 03.7		6.8
	05.7		6.7
	58.1		7.2
	11 00.2		7.2
	58.0		7.8
	12 00.9		7.8
	13 04.7		9.1
	06.4		9.2
	14 04.2		9.7
	06.3		9.7
	59.3		10.5
	15 01.0		10.4
	58.4		9.4
	16 00.4		9.3
	44.4		8.6
	45.8		8.6
	17 54.1		8.2
	56.2		8.2
	19 03.9		8.7
	06.2		8.7

Date	Time	H
	^h ^m	^r
4	19 19.3	31395
	22.4	95
	20 7.9	94
	12.0	93
	21 17.4	96
	20.4	96
	22 08.4	94
	11.5	94
	23 07.0	94
	09.6	94
5	0 07.2	95
	10.9	95
	1 09.7	96
	13.2	96
	2 05.8	97
	08.7	96
	3 10.0	99
	14.5	99
	4 40.8	402
	44.8	399
	5 10.4	400
	14.2	00
	6 08.6	04
	12.8	04
	7 14.4	12
	19.0	13
	8 08.8	15
	12.5	14
	9 11.4	09
	15.5	08
	10 11.5	06
	14.3	06
	11 06.3	13
	09.0	12
	12 06.9	19
	10.9	20
	13 11.6	11
	15.7	12
	14 12.6	10
	16.6	10
	15 06.4	15
	10.3	16
	16 06.5	15
	09.4	15
	51.5	09
	54.7	09
	18 03.8	08
	07.4	08
	19 11.9	07
	15.4	07

Date	Time	θ
	^h ^m	[°] [']
4	23 21.1	47 44.5
	24.3	45.1
5	5 27.2	44.9
	31.8	44.8
	11 19.2	42.8
	21.9	43.0
	17 10.9	42.7
	14.0	43.1

No. 83. Hirosima (広島)

Lat.=34° 17' 56" N., Long.=132° 26' 31" E.

Height=3 m

Sept. 1955

Inst. No. 21C Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time		δ	
	h	m	°	'
26	23	23.9	6	2.6
		26.7		2.4
		54.2		2.2
		55.9		2.2
27	0	59.7	5	2.0
	1	01.5		2.0
		59.3		2.0
	2	04.0		2.0
		59.1		2.0
	3	02.5		2.0
	4	24.1		2.0
		27.6		2.0
	6	00.6		1.9
		04.0		1.9
	7	12.6		1.1
		15.5		0.8
		55.3		0.0
		58.4		0.0
	9	05.1		59.7
		07.8		59.6
		56.7		0.0
		57.8		0.0
	10	57.4		2.5
		59.2		2.8
	11	53.1		3.6
		56.7		3.8
	12	55.4		5.8
		59.2		5.9
	14	03.7		4.5
		08.0		4.3
		58.5		4.0
	15	01.0		4.0
		55.0		3.9
		57.9		3.8
	16	52.5		1.3
		55.0		1.4
	17	56.6		3.1
		59.9		3.3
	18	59.9		3.6
	19	04.4		3.7
	20	09.3		4.3
		12.2		4.4
	21	00.1		3.3
		02.0		3.3
		55.6		2.2
		58.4		2.1
	22	56.5		1.8
	23	01.4		1.8

Date	Time		H
	h	m	r
26	23	38.0	31726
		42.7	26
27	0	02.3	29
		06.9	30
	1	07.4	29
		10.7	29
	2	21.8	28
		27.2	28
	3	09.4	29
		13.5	29
	4	35.2	27
		39.4	26
	6	10.8	34
		15.7	34
	7	24.0	29
		29.4	28
	8	09.8	21
		15.8	20
	9	14.7	05
		19.7	05
	10	05.3	699
		09.7	98
	11	05.2	702
		09.1	02
	12	07.4	10
		12.9	12
	13	08.3	38
		18.5	42
	14	15.7	65
		20.2	69
	15	07.7	65
		12.1	65
	16	05.5	63
		10.3	61
	17	01.2	48
		05.0	43
	18	17.0	09
		22.5	03
	19	15.9	06
		19.1	04
	20	18.6	697
		22.0	97
	21	07.4	91
		10.7	89
	22	07.1	717
		11.5	21
	23	09.3	18
		13.8	19

Date	Time		θ	
	h	m	°	'
27	6	33.4	48	1.9
		42.8		1.9
	11	18.9	47	59.2
		22.9	48	00.0
	17	15.1	47	58.9
		18.9		58.6
	23	26.1		59.6
		30.5	48	00.2

No. 84. Nagasima (長 島)

Lat.=34° 12' 26" N., Long.=136° 20' 26" E.

Height=3 m

Aug. 1955

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
24	^h 18 ^m 06.7	[°] 5 ['] 57.1
	09.7	57.2
	19 07.9	57.7
	10.3	57.8
	57.1	57.8
	20 01.2	57.7
	59.8	58.4
	21 02.6	58.3
	22 04.2	57.5
	06.8	57.7
	23 08.0	57.0
	12.6	57.0
	25 0 11.7	57.0
	15.5	57.0
	1 01.0	56.6
	04.6	56.5
	59.5	56.2
	2 03.2	56.2
25	57.4	55.9
	3 01.2	55.9
	56.2	55.8
	59.3	55.9
	4 58.5	55.3
	5 02.9	55.2
	6 11.7	52.7
	15.3	52.7
	7 03.9	52.6
	06.3	52.6
	8 01.9	53.8
	04.8	53.8
	9 01.8	55.7
	04.2	56.0
	57.4	58.5
	59.6	58.7
	11 00.1	6 00.7
	03.1	00.8
	57.2	01.6
	59.6	01.6
	13 09.3	01.7
	12.6	01.6
	58.5	01.0
	14 01.1	01.0
	57.7	5 58.9
	15 00.7	58.9
	58.4	57.8
	16 01.2	57.8
	59.9	56.8
	17 03.0	56.8
	18 06.4	57.2
	08.9	57.2

Date	Time	H
24	^h 17 ^m 54.1	^r 31274
	59.6	74
	18 15.8	72
	20.0	69
	19 18.8	69
	23.7	71
	20 08.5	62
	13.0	67
	21 10.5	66
	14.4	67
	22 14.3	68
	18.9	67
	23 20.5	68
	24.3	70
	25 0 20.6	72
	23.6	72
	1 12.1	72
	15.5	69
25	2 10.6	75
	14.5	75
	3 10.2	78
	14.2	77
	4 05.3	76
	09.6	75
	5 12.7	77
	17.4	77
	6 23.1	64
	28.4	62
	7 12.6	51
	17.1	50
	8 12.2	46
	18.3	46
	9 12.2	48
	16.8	46
	10 05.9	50
	10.1	50
	11 08.9	63
	11.9	63
	12 05.1	66
	08.2	67
	13 18.7	82
	22.4	82
	14 07.4	87
	11.4	83
	15 09.7	83
	13.2	85
	16 08.3	82
	11.7	83
	17 09.4	80
	12.2	80
	18 15.7	77
	19.5	76

Date	Time	θ
24	^h 23 ^m 38.5	[°] 47 ['] 23.6
	42.3	24.0
25	5 34.5	23.2
	39.8	23.3
	11 20.4	24.2
	25.8	23.8
	17 20.7	22.6
	23.1	22.9

No. 85. Izuhara (巖原) 1

Lat.=34° 12' 08" N., Long.=129° 17' 31" E.

Height=7 m

Oct. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time		δ	
	h	m	°	'
8	21	30.4	6	15.7
		32.4		15.7
		57.3		15.6
		59.8		15.8
	22	57.6		15.5
9	23	00.0		15.6
		59.8		15.5
	0	02.2		15.5
		58.3		15.4
	1	00.7		15.4
		59.4		15.2
	2	01.6		15.2
		58.2		15.3
	3	00.5		15.2
		59.1		14.6
	4	01.1		14.6
		59.2		14.9
	5	02.1		14.8
		59.7		15.0
	6	01.5		15.0
		58.5		15.0
	7	01.5		15.0
	8	02.5		13.3
		05.2		13.1
		58.0		11.7
		59.9		11.7
	9	59.2		11.0
	10	00.8		11.0
		59.1		13.2
	11	00.7		13.4
		57.2		16.9
		59.6		17.0
	12	59.6		18.6
	13	01.4		18.7
		58.9		18.8
	14	01.0		18.9
		58.3		17.9
	15	00.3		17.8
		58.9		16.8
	16	01.2		16.6
		59.5		15.6
	17	02.1		15.6
		58.6		15.3
	18	00.7		15.2
		58.8		15.1
	19	00.8		15.1
		58.6		15.2
	20	00.9		15.2
		59.2		15.3
	21	02.3		15.3

Date	Time		H
	h	m	r
8	22	07.0	31989
		10.7	90
9	23	06.2	87
		09.6	87
	0	08.0	90
		10.9	90
	1	07.5	89
		11.4	89
	2	08.7	97
		10.8	99
	3	07.2	96
		10.6	99
	4	07.0	32004
		10.1	04
	5	09.5	00
		13.0	00
	6	09.1	01
		12.9	01
	7	15.6	31990
		18.8	89
	8	10.3	85
		13.6	85
	9	06.0	76
		09.6	74
	10	13.7	63
		16.2	63
	11	07.1	62
		09.7	62
	12	08.2	76
		10.8	79
	13	07.1	95
		10.8	97
	14	06.5	32001
		10.4	01
	15	06.4	07
		10.2	06
	16	06.6	05
		09.9	04
	17	07.6	31996
		10.6	96
	18	06.0	93
		08.3	92
	19	06.1	86
		19.3	85
	20	06.3	90

Date	Time		θ	
	h	m	°	'
8	23	26.2	48	23.0
		29.5		23.1
9	5	24.7		22.2
		29.2		22.0
	11	23.2		23.0
		26.0		22.9
	17	31.9		23.2
		35.3		23.1

No. 86. Izu-hara (巖 原) 2

Lat.=34° 12' 06" N., Long.=129° 17' 45" E.

Height=7 m

Oct. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
10	h m 14 11.2	° ' 6 14.7
	13.3	15.0
	57.8	14.1
	59.8	14.0
	15 58.5	13.2
	16 00.2	13.1
	58.7	12.1
	17 00.9	12.1
	18 12.3	13.3
	13.8	13.2
	59.3	11.4
	19 01.5	11.3
	59.6	13.0
	20 01.7	13.2
	59.4	11.4
	21 02.1	11.3
	59.3	11.4
	22 01.6	11.4
	23 00.4	11.8
	03.0	11.8
	59.7	12.0
11	0 02.1	12.1
	59.9	12.0
	1 02.8	12.0
	58.6	11.6
	2 01.2	11.6
	58.1	12.4
	59.8	12.3
	3 59.6	12.0
	4 01.8	11.8
	5 00.8	11.8
	03.0	11.8
	58.7	12.2
	6 00.7	12.1
	57.6	11.6
	59.3	11.6
	7 59.1	09.8
	8 02.0	09.7
	58.4	08.6
	9 00.8	08.6
	58.0	08.3
	10 00.2	08.4
	11 00.5	10.4
	01.2	10.4
	58.8	12.6
	12 00.9	12.6
	58.0	14.1
	59.8	14.1
	13 58.8	14.6
	14 01.2	14.6

Date	Time	H
10	h m 14 21.6	r 31967
	24.4	64
	15 05.4	64
	08.1	65
	16 06.0	62
	09.8	61
	17 07.3	59
	10.1	57
	18 20.6	20
	23.8	18
	19 07.5	34
	10.3	34
	20 08.2	34
	11.0	39
	21 09.9	50
	14.2	48
	22 09.5	45
	13.1	44
	23 10.2	31
	13.8	31
11	0 08.4	43
	12.4	44
	1 09.7	34
	14.6	34
	2 08.0	32
	11.6	33
	3 05.4	38
	08.2	37
	4 06.9	38
	09.8	37
	5 14.3	40
	17.4	37
	6 06.2	40
	09.4	40
	7 05.0	41
	07.9	41
	8 08.9	31
	12.4	29
	9 06.2	23
	09.0	22
	10 05.8	18
	08.2	19
	11 05.9	19
	08.6	18
	12 05.6	19

Date	Time	θ
10	h m 17 53.1	° ' 48 26.0
	18 00.0	25.9
	23 30.0	26.6
	35.9	26.7
11	5 26.5	26.6
	29.0	26.9
	11 24.1	26.0
	27.5	26.0

No. 87. Yamaguti (山口)

Lat.=34° 11' 07" N., Long.=131° 28' 27" E.

Height=70 m

Oct. 1955

Inst. No. 21C Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ	
	^h ^m	[°]	[']
8	21 39.3	6	2.0
	41.0		1.9
	22 03.7		2.2
	05.5		2.2
	23 03.6		2.3
	06.5		2.1
	55.7		1.9
	58.4		1.9
	9 0 56.9		2.1
	58.9		2.1
9	2 01.4	5	2.0
	03.3		1.9
	57.5		1.9
	3 02.2		1.9
	4 00.1		1.5
	03.1		1.5
	58.3		2.0
	5 02.4		1.8
	56.8		2.1
	6 02.1		2.1
	59.2		2.2
	7 02.2		2.1
	57.1		1.0
	8 00.4		0.7
	9 07.3		58.5
	10.7		58.3
	10 04.3		58.3
	06.6		58.4
	55.4		6 1.0
	57.6		1.0
	11 56.9		4.6
	12 00.0		4.8
	58.7		6.4
	13 01.5		6.4
	55.9		6.3
	58.8		6.3
	14 56.7		5.5
	15 01.0		5.4
	55.9		4.1
	59.9		4.0
	16 55.3		2.7
	57.4		3.1
	17 56.0		2.7
	59.2		2.7
	18 55.4		1.7
	58.0		1.4
	19 57.8		1.7
	20 00.3		1.7
	58.0		1.9
	21 00.9		1.9

Date	Time	H
	^h ^m	^r
8	21 51.7	31871
	57.7	71
	22 11.6	68
	15.4	69
	23 13.2	69
	19.3	71
	9 0 05.1	71
	09.0	71
	1 04.9	72
	09.0	70
9	2 09.1	82
	13.1	79
	3 11.8	79
	16.4	74
	4 10.5	86
	14.2	85
	5 19.9	83
	23.7	85
	6 10.3	83
	13.7	82
	7 11.5	72
	14.9	73
	8 08.3	65
	12.0	66
	9 18.4	57
	23.6	55
	10 13.4	45
	18.3	42
	11 04.7	46
	10.4	49
	12 09.9	63
	14.6	62
	13 07.8	74
	11.2	74
	14 06.2	77
	11.1	79
	15 10.4	85
	14.1	85
	16 08.0	84
	11.9	84
	17 04.6	80
	08.1	79
	18 11.2	72
	22.4	73
	19 06.4	71
	10.3	71
	20 08.0	72
	14.9	73
	21 08.7	73
	13.3	74

Date	Time	θ
	^h ^m	[°] [']
8	23 34.1	47 59.5
	38.0	59.4
9	5 36.2	58.7
	39.2	58.9
	11 25.6	59.5
	28.5	59.3
	17 18.1	59.2
	21.4	59.5

No. 88. Miyake Izu (三宅伊豆)

Lat.=34° 07' 06'' N., Long.=139° 30' 32'' E.

Height=30 m

May 1955

Inst. No. 21A Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
11	9 52.6	4 55.4
		55.6
	11 06.1	57.5
		57.7
	12 25.8	59.2
		59.1
	13 08.1	59.0
		59.0
	12.7	58.7
	58.8	58.7
	14 01.3	58.7
	15 02.1	57.3
		57.1
	04.8	56.0
	16 00.0	56.0
		56.0
	02.9	55.1
	17 03.8	55.0
		55.1
	06.8	55.1
	18 01.5	55.3
		55.2
	04.5	54.6
	53.8	54.6
	19 00.7	54.8
		54.8
	20 05.6	54.7
		54.7
	13.0	54.7
	57.8	54.8
12	21 02.1	54.4
		54.3
	22 01.8	54.2
		54.2
	05.6	53.9
	54.7	53.9
	57.7	53.5
	54.8	53.5
	12 08.4	53.8
		53.7
	13.0	53.2
	59.2	53.4
	1 03.0	52.0
		51.6
	56.9	51.3
	59.8	55.5
	2 56.9	51.3
		51.5
	3 00.3	51.4
		50.9
	56.5	51.0
	4 01.5	52.2
		52.3
	56.0	53.6
	5 00.2	53.8
	6 00.7	56.0
		56.2
	05.4	
	7 00.5	
	05.9	
	09.4	
	12.7	
	57.4	
	8 00.8	
	56.1	
	59.2	
	9 29.1	
	31.9	
	56.6	
	10 04.3	
	57.3	
	11 03.5	

Date	Time	H
	h m	r
11	10 09.2	29557
		56
	15.7	65
	11 14.8	67
		71
	20.6	71
	12 42.6	71
		71
	47.4	71
	13 22.8	71
		71
	28.3	73
	14 13.8	75
		68
	17.3	69
	15 16.8	69
		68
	22.1	67
	16 11.4	66
		63
	15.3	64
	17 16.5	63
		64
	20.4	64
	18 10.6	71
		71
	18.9	73
	19 08.7	73
		73
	12.9	73
	20 22.0	74
		71
	27.6	79
	21 19.3	79
		75
	21.6	75
12	22 17.2	77
		77
	28.2	72
	23 08.6	73
		76
	15.8	77
	12 23.3	77
		72
	29.8	73
	1 14.1	76
		77
	19.7	71
	2 09.5	69
		62
	14.8	63
	3 11.7	60
		50
	16.4	57
	4 14.3	58
		54
	22.7	54
	5 09.9	
	20.7	
	7 23.0	
	34.8	
	39.6	
	29.1	
	8 10.8	
	16.8	
	21.9	
	26.9	
	9 10.1	
	14.0	

Date	Time	θ
	h m	° '
11	11 37.6	48 34.0
		34.0
	42.4	33.8
	17 33.8	34.1
		33.7
12	23 38.1	33.7
		33.6
	34.9	33.6
	5 39.0	33.6
		33.6
	31.2	
	37.8	

No. 89. Ako (阿古)

Lat.=34° 04' 36" N., Long.=139° 28' 59" E.

Height=4 m

May 1955

Inst. No. 21A Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
8	h m 10 29.5	° ' 4 17.4
	32.5	17.4
	11 11.5	19.2
	15.5	19.5
	12 37.1	21.3
	40.0	21.5
	58.0	22.9
	13 01.7	22.8
	59.9	21.6
	14 03.2	21.5
	56.4	20.4
	15 00.1	19.9
	05.8	19.5
	10.0	19.4
	57.0	19.0
	16 02.6	19.2
	57.8	18.5
	17 02.3	18.4
	35.7	16.8
	41.1	16.8
	19 13.4	18.0
	15.5	18.1
	59.3	18.0
	20 03.1	17.9
	21 08.5	15.1
	14.8	14.7
	58.2	16.3
	22 03.2	16.5
	55.0	17.5
	23 00.1	17.4
	59.0	17.3
9	0 01.7	17.3
	59.6	16.7
	1 05.3	16.7
	2 09.6	16.7
	17.1	16.7
	3 00.4	16.4
	04.9	16.4
	59.7	15.6
	4 02.3	15.8
	5 06.2	16.1
	10.0	16.0
	6 22.3	15.6
	25.4	15.8
	57.6	15.6
	7 01.8	15.6
	58.4	15.4
	8 02.6	15.0
	9 00.6	16.3
	04.1	16.5
	56.0	18.0
	59.3	18.1
	11 13.1	20.2
	20.0	20.2
	12 08.0	20.5
	11.7	20.8

Date	Time	H
8	h m 10 53.1	r 29745
	59.7	46
	11 23.4	53
	28.1	52
	12 49.1	47
	51.7	45
	13 11.0	39
	15.5	40
	14 13.6	41
	18.9	42
	15 19.1	43
	26.4	43
	16 15.3	44
	22.8	41
	17 16.0	41
	24.7	41
	18 51.9	47
	19 00.0	51
	28.2	49
	35.3	51
	20 12.2	47
	24.4	53
	21 40.7	81
	46.7	75
9	22 19.7	45
	26.0	47
	23 09.2	52
	13.2	52
	0 10.0	56
	16.2	53
	1 20.7	58
	29.8	57
	2 28.0	43
	3 16.2	60
	22.1	61
	4 17.5	39
	27.4	39
	5 22.3	43
	27.7	45
	6 44.3	34
	47.6	34
	7 11.9	38
	16.2	37
	8 10.8	28
	14.9	29
	9 12.8	43
	17.1	45
	10 18.8	58
	23.7	61
	11 32.1	71
	36.5	73

Date	Time	θ
8	h m 11 49.7	° ' 48 20.6
	58.7	20.7
	18 00.7	21.0
	04.5	21.0
	23 26.7	21.1
9	30.8	21.0
	5 53.7	21.0
	6 00.8	21.1

No. 90. Tubota (坪 田)

Lat.=34° 03' 20" N., Long.=139° 33' 02" E.

Height=20 m

May 1955

Inst. No. 21A Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
6	h m 7 32.5	° ' 6 8.0
	45.6	6.7
	9 09.4	9.8
	12.7	9.9
	10 07.9	14.3
	11.4	14.3
	11 04.6	16.1
	07.8	16.5
	12 26.2	16.8
	30.5	16.7
	13 03.9	16.7
	07.5	16.6
	14 16.7	16.5
	19.2	16.4
	15 07.3	16.2
	10.2	16.3
	16 13.1	14.3
	18.3	14.2
	17 04.7	13.2
	09.9	13.3
	18 28.3	12.8
	43.1	12.8
7	20 04.9	13.2
	08.1	13.1
	57.7	12.9
	21 01.1	13.1
	22 03.1	11.3
	23 31.6	11.3
	0 38.9	11.7
	41.6	11.8
	1 13.6	11.8
	20.0	11.9
	2 00.5	11.6
	04.9	11.6
	58.9	11.4
	3 03.0	11.2
	57.1	10.0
	4 01.2	10.0
	57.6	10.2
	5 01.0	10.2
	6 01.9	8.4
	05.5	8.3
	7 00.6	9.6
	04.3	10.0
	8 00.8	10.0
	03.9	10.0
	54.5	12.7
	58.9	12.4

Date	Time	H
6	h m 8 23.9	r 30599
	30.5	95
	9 25.1	82
	28.8	80
	10 23.3	90
	26.7	91
	11 29.0	613
	32.3	12
	12 45.7	20
	51.7	23
	13 18.4	25
	25.2	29
	14 36.6	06
	41.7	06
	15 20.0	593
	26.0	91
	16 36.2	607
	44.4	08
	17 28.1	03
	34.2	01
	18 56.6	571
	19 02.8	68
	20 21.5	60
	26.7	60
7	21 11.3	52
	20.4	71
	22 37.6	91
	57.1	40
	23 08.5	39
	44.7	46
	50.2	51
	0 52.9	71
	58.4	68
	1 38.1	80
	46.6	80
	2 16.5	77
	22.8	79
	3 17.0	91
	26.4	94
	4 46.3	77
	51.6	78
	5 11.5	80
	16.6	80
	6 16.4	72
	31.2	67
	7 14.9	80
	18.7	80
	8 23.1	75
	27.3	80
	9 12.2	78
	18.3	78

Date	Time	θ
6	h m 11 54.7	° ' 47 49.2
	59.3	48.8
	17 55.1	49.0
7	58.8	48.9
	0 07.5	53.1
	15.1	50.8
	5 37.5	49.6
	43.3	49.7

No. 91. Imabari (今 治)

Lat.=34° 03' 42" N., Long.=133° 00' 54" E.

Height=15 m

Oct. 1955

Inst. No. 21C Coil 21C Mag. A Cell 2 Resist. 1

Declination			Horizontal Intensity			Dip		
Date	Time		Time		H	Date	Time	
	h	m	h	m			h	m
1	16	18.1	16	48.7	31694	1	23	52.8
		21.4		54.6	94	2		58.2
	17	01.2	17	11.8	94		5	27.2
		04.4		19.8	91			32.0
	18	01.5	18	11.9	91		11	39.7
		04.8		14.7	91			46.0
	19	01.7	19	15.7	94		17	32.5
		03.6		19.8	93			40.9
	20	03.8	20	19.6	702			
		08.5		23.5	699			
	21	05.4	21	15.5	701			
		08.6		18.9	02			
		58.4	22	06.4	08			
	22	00.4		11.7	04			
	23	05.7	23	15.8	15			
		08.1		21.5	18			
2	0	20.2	2	0	29.4			
		22.4		34.1	10			
	1	03.1	1	12.2	10			
		05.2		15.7	09			
		58.6	2	08.5	12			
	2	02.0		12.4	11			
		58.7	3	10.7	11			
	3	03.4		15.2	12			
		58.7	4	09.7	10			
	4	01.7		14.6	07			
		56.5	5	07.5	10			
		59.4		11.2	11			
	5	58.9	6	08.9	10			
	6	01.8		12.9	10			
		56.0	7	07.9	08			
		59.8		11.7	07			
	7	55.1	8	05.6	05			
		58.8		09.8	04			
	9	03.4	9	17.5	06			
		09.1		20.9	07			
		56.7	10	08.0	09			
		59.6		13.7	09			
10	56.8	4.4	11	08.2	11			
11	01.0	4.4		12.3	11			
12	07.6	5.9	12	23.2	23			
	10.8	5.9		27.7	26			
13	01.1	5.1	13	12.4	30			
	05.0	5.0		15.6	31			
	59.0	3.6	14	15.7	37			
14	03.4	3.2		21.2	36			
	55.6	2.4	15	12.3	28			
15	00.2	2.3		17.2	29			
	55.5	1.2	16	11.6	13			
16	01.3	0.9		16.0	14			
	58.4	1.6	17	16.6	696			
17	02.6	1.7		20.5	94			

No. 92. Kawanoe (川之江)

Lat.=34° 00' 34" N., Long.=133° 34' 14" E.

Height=5 m

Oct. 1955

Inst. No. 21C Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ	
5	h m 15 10.1	° ' 6 4.3	
	12.0	4.2	
	16 02.9	2.9	
	04.9	2.6	
	56.2	2.5	
	58.1	2.5	
	17 58.2	0.8	
	18 00.6	0.8	
	56.3	1.2	
	59.7	1.2	
	20 05.5	1.3	
	08.8	1.4	
	58.0	1.8	
	21 01.8	1.9	
	58.1	2.3	
	22 01.5	2.3	
	23 00.5	1.8	
	03.4	1.8	
	6	0 00.8	1.2
		03.9	1.2
		56.5	2.3
		59.2	2.3
		1 56.9	1.1
		58.9	1.1
		3 25.6	0.5
		27.7	0.4
57.2		0.4	
59.0		0.3	
5 02.9		2.0	
04.9		1.9	
6 01.1		2.5	
03.4		2.5	
7 16.0		4.2	
18.9		4.3	
8 03.7		2.1	
06.9		1.9	
57.8		1.2	
9 00.5		1.2	
57.4		1.4	
10 01.0		1.4	
56.5		2.5	
59.0		2.6	
12 00.9		6.7	
03.8		6.8	
56.4		7.8	
13 00.0		7.8	
57.1		7.7	
14 00.4		7.8	
57.9		6.7	
15 01.5		6.7	
57.0	6.0		
59.9	5.8		
16 56.1	4.8		
59.0	4.7		
17 55.7	2.5		
58.8	2.7		
18 59.2	4.1		
19 02.9	4.4		

Date	Time	H	
5	h m 16 20.9	r 31667	
	25.5	65	
	17 04.5	59	
	10.6	59	
	18 06.8	58	
	11.7	59	
	19 07.8	50	
	11.3	50	
	20 18.2	57	
	22.3	59	
	21 08.4	45	
	12.9	41	
	22 11.0	31	
	15.2	27	
	23 15.1	24	
	18.8	28	
	6	0 11.2	25
		15.3	31
		1 05.8	48
		10.5	50
		2 04.7	44
		08.5	43
		3 35.7	42
		43.5	37
		4 04.7	32
		09.2	33
5 11.8		36	
16.2		32	
6 10.4		44	
14.1		44	
7 27.4		44	
31.6		45	
8 14.0		27	
17.7		26	
9 08.0		18	
12.4		18	
10 09.1		22	
14.6		18	
11 06.4		34	
11.8		21	
17.3		32	
12 15.2		10	
19.2		10	
13 10.4		24	
14.6		25	
14 09.4		26	
14.0		25	
15 10.9	36		
14.7	34		
16 07.5	32		
11.8	33		
17 05.9	24		
10.2	23		
18 06.0	14		
10.9	11		
19 11.3	03		
14.9	02		

Date	Time	θ
5	h m 17 23.5	° ' 47 29.9
	27.8	29.0
	23 32.0	31.0
6	35.2	30.9
	5 29.7	31.8
	39.0	29.4
	11 30.2	31.4
	33.2	31.5
	17 20.6	31.5
24.1	31.6	

No. 93. Totugawa (十津川)

Lat.=33° 56' 18" N., Long.=135° 47' 47" E.

Height=150 m

Aug., Sept. 1955

Inst. No. 29 Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time		δ	
	h	m	°	'
31	20	19.6	5	50.6
		23.2		50.6
	21	00.0		51.8
		03.3		51.8
	22	03.5		52.3
		08.2		52.4
		58.1		52.4
	23	01.1		52.3
		58.8		52.4
	1	0		52.4
1		01.5		52.4
		57.8		52.1
	1	01.0		52.1
	2	05.5		52.0
		17.7		51.8
	4	29.8		51.5
		33.6		51.9
	5	00.0		51.2
		02.7		51.8
	6	21.4		50.3
		24.4		50.3
	7	03.0		51.0
		06.3		51.0
		58.5		51.2
	8	01.4		51.6
		57.5		54.3
		59.7		54.4
	9	58.9		56.0
	10	02.6		56.0
		55.5		57.2
		57.6		57.2
	12	04.0		57.1
		07.2		57.0
		56.8		56.3
		59.1		56.2
	13	58.9		54.3
	14	03.8		54.1
		58.2		52.1
	15	03.4		52.0
		59.8		51.1
	16	03.8		51.1
		56.6		51.3
	17	01.6		51.3
	18	24.1		52.5
		27.3		52.2
		58.2		52.7
	19	00.8		52.7
		55.8		52.4
		58.0		52.4
	21	00.3		52.4
		02.3		52.3
		50.3		52.1
		53.1		51.8

Date	Time		H
	h	m	r
31	20	36.7	31418
		42.8	22
	21	12.9	20
		16.8	20
	22	16.5	25
		22.2	22
	23	12.4	25
		18.0	25
	1	0	20
		13.4	22
1	1	08.0	18
		11.4	17
	2	38.1	22
		43.1	23
	4	41.2	23
		48.0	30
	5	09.6	29
		14.0	29
	6	46.6	20
		51.6	21
	7	13.7	15
		20.1	16
	8	08.8	22
		12.4	18
	9	06.8	17
		11.3	17
	10	12.1	28
		17.4	24
	11	03.3	394
		07.3	95
	12	14.6	442
		17.9	43
	13	05.6	40
		08.8	44
	14	14.4	46
		19.4	43
	15	12.4	48
		17.5	52
	16	10.6	46
		14.3	43
	17	12.5	27
		16.7	29
	18	34.9	20
		41.7	17
	19	07.1	25
		11.7	26
	20	04.0	28
		08.5	29
	21	10.1	30
		14.7	30
	22	01.0	22
		06.4	22

Date	Time		θ	
	h	m	°	'
31	23	31.1	47	9.0
		34.4		9.1
1	5	32.3		8.8
		37.9		9.1
	11	16.4		9.0
		20.0		8.7
	17	41.3		8.8
		50.7		9.5

No. 94. Katumoto (勝 本)

Lat.=33° 51' 05" N., Long.=129° 41' 33" E.

Height=2 m

Oct. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
12	^h 17 ^m 02.7	[°] 5 ['] 56.5
	04.6	56.6
	59.0	57.5
	18 00.7	57.6
	58.6	57.9
	19 01.5	57.9
	20 03.0	57.8
	05.3	57.8
	59.1	57.8
	21 01.7	57.8
	22 00.2	57.8
	03.7	57.9
	59.7	57.8
	23 02.4	57.8
	58.5	57.8
	13 01.0	57.8
	1 13.9	57.7
	15.9	57.7
	59.2	57.7
	2 00.7	57.7
	3 07.6	57.6
	09.6	57.7
	59.5	57.5
13	4 00.5	57.5
	59.3	57.5
	5 01.6	57.6
	59.2	57.8
	6 02.0	57.7
	7 00.2	57.6
	02.4	57.6
	59.6	56.7
	8 02.4	56.7
	58.7	55.7
	9 01.0	55.8
	59.1	55.5
	10 01.0	55.5
	11 00.3	56.2
	02.8	56.2
	59.1	58.0
	12 01.0	58.0
	59.7	59.3
	3 02.6	59.3
	4 01.2	59.3
	05.6	59.1
	59.6	58.6
	15 00.8	58.6
	59.7	57.8
	16 01.9	57.7
	59.7	56.7
	17 02.2	56.5

Date	Time	H
12	^h 17 ^m 11.6	^r 31946
	15.3	45
	18 06.1	40
	09.0	39
	19 07.5	37
	10.3	38
	20 11.3	40
	14.2	38
	21 09.2	37
	12.1	37
	22 10.8	38
	14.0	38
	23 07.3	37
	09 3	37
	13 0 06 6	38
	10.6	39
	1 22.6	39
	25.9	40
	2 08.7	41
	10.8	41
	3 15.7	43
	19.4	43
	4 07.1	43
	10.2	42
	5 08.0	47
	11.0	46
13	6 16.6	44
	19.2	44
	7 08.7	42
	12.4	41
	8 10.9	34
	13.3	34
	9 06.9	24
	09.7	24
	10 06 9	22
	11.1	22
	11 17.5	24
	20.0	26
	12 05.8	34
	08.3	34
	13 08.9	49
	12.2	49
	14 11.8	54
	14.7	54
	15 24.6	55
	26.5	54
	16 07.7	51
	10.9	48
	17 08.8	43
	12.1	41

Date	Time	θ
12	^h 17 ^m 27.4	[°] 48 ['] 4.5
	30.6	4.5
	23 17.4	5.8
13	21.0	5.7
	5 20.6	5.4
	32.5	5.3
	11 34 3	4.5
	39.5	4.5

No. 95. Minabe (南部)

Lat.=33° 46' 10" N., Long.=135° 17' 58" E.

Height=50 m

Sept. 1955.

Inst. No. 21C Coil 29B Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
11	h m 7 41.6	° ' 5 52.9
	46.1	52.6
	9 02.2	52.9
	04.9	53.0
	56.9	54.1
	59.4	54.1
	10 58.2	55.7
	11 00.7	55.8
	12 25.3	57.0
	28.1	57.0
	57.4	57.1
	59.6	57.2
	13 58.5	56.5
	14 03.0	56.6
	58.5	56.9
	15 02.0	56.8
	16 00.3	56.2
	02.9	56.2
	17 18.4	55.7
	20.8	55.6
	18 00.7	55.3
	04.7	55.2
	59.7	55.2
	19 04.1	55.2
	20 02.7	55.1
	08.6	55.1
	57.0	55.3
	21 02.5	55.3
	22 04.1	55.0
	07.7	54.9
	56.7	55.0
	58.9	54.9
12	0 23.3	54.6
	26.1	54.4
	1 06.0	54.5
	09.7	54.4
	53.3	54.0
	55.6	53.8
	2 52.4	54.0
	55.0	54.1
	3 51.1	54.2
	52.6	54.2
	5 01.2	54.0
	06.6	54.0
	6 34.7	53.7
	37.6	53.5
	59.8	52.9
	7 04.8	52.8
	8 09.8	51.3
	13.8	51.3
	9 27.0	51.0
	31.2	51.0
10	49.4	54.2
	53.1	54.2

Date	Time	H
11	h m 8 15.6	r 31532
	27.6	28
	9 13.7	25
	19.5	25
	10 45.3	22
	51.2	28
	11 09.9	26
	13.9	27
	12 35.7	29
	40.9	27
	13 10.6	30
	15.7	30
	14 15.9	24
	21.2	22
	15 14.9	24
	20.7	29
	16 10.6	30
	15.4	30
	17 29.2	31
	35.8	30
	18 15.5	29
	19.8	30
	19 21.2	28
	26.8	30
	20 20.8	30
	26.2	30
	21 15.1	30
	19.4	31
	22 18.4	36
	24.7	29
	23 12.8	39
	18.5	38
12	0 41.6	38
	51.1	37
	1 25.2	40
	30.4	41
	2 07.6	44
	14.4	44
	3 05.5	42
	10.1	42
	4 07.3	44
	14.4	44
	5 18.3	41
	22.8	41
	6 47.3	38
	51.9	37
	7 12.7	37
	17.0	35
8	27.8	22
	32.2	20
	9 43.2	22
9	49.4	22

Date	Time	θ
11	h m 11 44.0	° ' 46 58.3
	50.7	57.9
	16 26.1	59.0
	29.6	58.9
	23 53.5	58.3
12	0 00.3	57.8
	5 58.8	59.1
	8 43.6	58.8
	51.0	59.0

No. 96. Hukuoka (福岡)

Lat.=33° 39' 48" N., Long.=130° 18' 50" E.

Height=16 m

Oct. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Date	Time	δ
5	h m 14 27.0	° ' 5 39.5
	25.3	39.6
	58.7	38.5
	15 01.0	38.6
	59.3	37.3
	16 01.5	37.3
	17 02.3	36.6
	04.8	36.6
	18 13.8	37.3
	16.4	37.3
	19 02.9	37.4
	04.5	37.5
	59.2	37.5
	20 01.6	37.5
	59.4	37.5
	21 01.9	37.6
	58.9	38.0
	22 01.3	38.0
	51.5	37.6
	23 01.8	37.6
6	0 00.4	37.2
	02.9	37.1
	58.8	37.8
	1 01.4	37.7
	57.9	36.9
	2 00.5	37.0
	59.5	38.3
	3 02.8	37.9
	4 00.6	35.8
	03.4	35.9
	5 08.4	37.1
	11.2	37.1
	6 19.3	37.9
	21.6	37.9
	7 00.9	39.6
	03.3	39.7
	8 00.6	37.5
	03.1	37.1
	9 07.1	36.2
	09.4	36.2
	59.1	36.6
	10 01.2	36.7
	58.8	37.5
	11 00.6	37.6
	59.7	38.9
	12 02.1	39.0
	13 02.8	41.1
	05.3	41.2
	59.0	41.0
	14 01.8	41.0
	15 00.0	40.1
	02.1	40.1
	16 00.0	39.3
	02.3	39.2
	59.6	37.8
	17 01.6	38.0
	58.9	36.2
	18 01.3	36.3

Horizontal Intensity

Date	Time	H
5	h m 14 37.3	r 31968
	42.0	68
	15 08.4	72
	11.9	71
	16 11.8	64
	15.0	62
	17 11.1	49
	13.8	49
	18 22.6	50
	25.6	46
	29.2	45
	34.8	47
	19 12.5	43
	16.6	43
	20 09.5	46
	14.0	46
	21 09.2	34
	13.4	30
	22 07.6	18
	11.2	18
	23 09.1	11
	12.4	13
6	0 09.8	12
	13.8	20
	19.9	26
	23.0	26
	1 02.0	40
	12.5	38
	2 06.9	32
	10.6	32
	3 09.3	51
	12.4	51
	4 11.8	23
	15.8	28
	5 17.7	31
	21.1	31
	6 29.4	31
	32.6	30
	7 13.2	37
	19.3	39
	8 10.3	21
	14.1	20
	9 15.6	12
	19.3	11
	10 08.1	12
	11.2	12
	11 06.6	15
	09.6	15
	12 08.6	04
	11.5	03
	15.5	04
	13 11.2	19
	14.6	18
	14 12.6	19
	18.3	20
	28.5	23
	32.0	22
	15 07.5	22

Horizontal Intensity

Date	Time	H
6	h m 15 10.2	r 31924
	16 08.0	23
	11.4	23
	17 07.1	19
	09.9	18
	18 07.2	04
	09.8	06

* Cell 3

Dip

Date	Time		θ	
5	17	^h 40.6	47	[°] 35.7
		^m 48.8		35.7
	23	25.2		37.2
		29.6		37.3
6	5	55.8		36.5
		58.3		36.5
	11	22.3		37.4
		24.4		37.4
	17	36.1		39.0
		38.8		38.8

No. 97. Nakatu (中 津)

Lat.=33° 36' 12" N., Long.=131° 11' 16" E.

Height=6 m

Oct. 1955

Inst. No. 21C Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
11	^h ^m	[°] [']
	15 00.4	5 56.2
	03.5	56.1
	55.5	55.0
	57.5	55.0
	16 53.5	54.2
	55.4	54.3
	18 38.0	58.0
	39.8	57.9
	58.2	56.7
	19 00.3	56.8
	56.9	6 4.7
	59.0	4.7
	22 34.2	5 55.3
	39.2	55.2
	23 06.1	55.6
	09.6	55.6
	57.8	55.8
12	0 01.8	55.8
	57.8	56.2
	1 00.6	56.3
	57.0	55.7
	2 01.0	55.6
	59.7	56.4
	3 01.5	56.3
	59.2	56.8
	4 01.3	56.7
	58.3	56.3
	5 00.0	56.2
	56.5	56.0
	58.1	56.1
	7 03.8	54.7
	05.5	54.6
	8 00.5	53.5
	02.4	53.4
	9 05.5	52.9
	08.7	52.9
	59.1	53.4
	10 02.4	53.4
	59.1	54.7
	11 01.3	54.7
	57.5	56.8
	12 00.2	56.8
	58.4	58.4
	13 02.2	58.4
	14 00.9	58.0
	03.3	57.9
	58.1	56.9
	15 01.2	56.9

Date	Time	H
11	^h ^m	^r
	15 09.6	32084
	12.9	85
	16 02.0	65
	04.9	67
	17 02.1	47
	06.0	47
	18 45.3	34
	51.3	37
	19 10.6	35
	15.1	34
	20 04.9	80
	07.7	80
	22 48.6	79
	53.0	80
	23 16.9	73
	21.4	71
12	0 09.2	58
	14.4	58
	1 07.9	69
	12.1	69
	2 07.9	67
	11.9	65
	3 07.1	63
	11.1	63
	4 08.7	71
	13.5	72
	5 05.9	71
	09.7	69
	6 04.4	71
	08.9	70
	7 11.8	67
	14.9	68
	8 10.1	58
	14.9	58
	9 15.6	53
	19.1	52
	10 09.0	52
	12.5	52
	11 06.8	52
	09.9	50
	12 06.0	59
	09.1	60
	13 08.6	73
	13.3	73
	14 10.6	80
	14.5	82
	15 10.7	83
	14.2	82

Date	Time	θ
11	^h ^m	[°] [']
	17 25.0	47 23.6
	35.4	24.1
12	23 34.4	23.9
	37.6	24.2
	5 26.7	23.8
	31.0	23.6
	11 21.2	23.0
	24.0	22.9

No. 98. Ōzato (大 里)

Lat.=33° 35' 57" N., Long.=134° 22' 00" E.

Height=2 m

Dec. 1955

Inst. No. 21C Coil 21C Mag. C Cell 2 Resist. 1

Declination

Date	Time	δ
1	h m 17 17.6	° ' 5 51.7
	20.1	51.8
	18 37.3	52.0
	39.6	52.1
	58.1	52.5
	19 00.9	52.5
	58.1	52.0
	20 00.4	52.1
	56.9	52.0
	58.8	52.1
	21 59.1	52.9
	22 01.8	53.0
	59.3	49.5
	23 02.4	49.6
2	21.6	51.3
	59.9	51.9
	0 02.1	52.1
	58.8	52.5
	1 01.2	52.4
	57.0	51.4
	59.3	51.3
	3 03.5	52.1
	06.6	52.4
	56.4	51.3
	59.6	51.3
	4 57.5	53.4
	5 00.4	53.6
	59.0	55.2
	6 02.2	55.4
	59.7	56.9
	7 02.6	56.9
	53.4	55.6
	55.9	55.6
	9 11.5	55.5
	14.1	55.6
	57.3	55.3
	59.5	55.3
	10 59.7	55.6
	11 01.7	55.8
	55.5	56.9
	58.0	56.9
	13 00.9	56.1
	02.9	56.3
	14 03.3	55.9
	05.9	55.8
	59.6	55.3
	15 01.7	55.3
	16 00.1	55.3
	01.6	55.3
	17 03.2	55.8
	06.2	55.8
	58.3	55.9
	18 00.3	55.8
	23 10.0	53.3

Declination

Date	Time	δ
2	h m 23 12.9	° ' 5 53.3
	3 0 00.4	53.4
	03.0	53.4
	1 00.6	53.8
	02.7	53.9
	2 06.3	53.9
	08.0	53.9
	3 02.2	53.5
	03.7	53.5
	57.8	54.0
	59.6	54.0
	4 56.8	54.1
	59.4	54.0
	5 57.8	53.9
3	58.8	53.8
	6 58.4	53.4
	7 00.1	53.3
	57.9	54.1
	8 00.1	54.0

Horizontal Intensity

Date	Time	H
1	h m 17 28.5	r 31738
	31.8	38
	18 48.3	20
	52.9	19
	19 06.0	18
	09.8	18
	20 07.0	18
	09.9	18
	21 03.9	14
	06.9	15
	22 07.9	14
	11.1	13
	23 09.2	18
	12.1	15
2	0 09.7	15
	13.4	15
	1 09.1	38
	11.4	41
	2 05.2	697
	09.4	94
	3 13.9	98
	18.4	701
	4 09.3	687
	13.8	84
	5 08.5	77
	12.6	80
	6 11.4	77
	15.8	75
	7 10.5	96
	14.8	701
	8 01.7	691
	05.1	89
	9 20.1	87
	23.9	87
	10 07.3	80
	10.9	78
	11 08.2	71
	11.5	72
	12 03.7	71
	06.3	72
	13 07.8	66
	10.4	66
	14 12.1	61
	14.5	61
	15 07.5	57
	10.6	56
	16 09.2	56
	13.0	52
	17 18.0	45
	22.9	45
	31.1	40
	34.5	39
	18 06.3	38
	09.3	39

Horizontal Intensity

Dip

Date	Time		H
	^h	^m	^r
2	23	28.3	31685
		33.6	87
3	0	08.4	91
		11.5	92
	1	08.2	98
		10.9	98
	2	15.1	98
		18.2	99
	3	08.7	704
		11.8	05
	4	05.7	01
		09.5	04
	5	05.5	10
		09.0	07
	6	05.1	09
		09.5	08
	7	06.3	17
		10.0	17
	8	06.0	21
		08.9	21

Date	Time		θ	
	^h	^m	[°]	[']
1	17	41.7	46	53.1
		46.9		52.6
	23	33.1		54.6
		36.7		54.4
2	5	27.7		55.7
		30.6		55.9
	11	23.7		56.3
		27.7		56.3
	16	31.2		58.9
		35.0		57.9

No. 99. Karatu (唐 津) 1

Lat.=33° 27' 05" N., Long.=129° 58' 10" E.

Height=4 m

Oct. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination			Horizontal Intensity			Dip		
Date	Time	δ	Date	Time	H	Date	Time	θ
15	h m	° '	15	h m	r	15	h m	° '
	11 59.5	5 48.9		12 06.6	32224		17 37.4	47 14.7
	12 01.4	48.8		09.2	24		40.5	14.5
	59.5	50.6		13 07.7	31		23 22.8	15.1
	13 02.0	50.4		11.0	31		30.0	15.0
	58.4	51.1		14 07.6	44		5 26.4	14.9
	14 00.4	51.2		10.0	43		28.7	14.9
	58.3	50.8		15 05.5	38		11 38.6	14.5
	15 00.1	50.7		08.6	39		42.8	14.5
	59.4	50.0		16 09.0	28			
	16 01.8	49.9		11.1	28			
	59.2	49.1		17 07.4	20			
	17 01.4	49.0		10.9	19			
	58.2	48.7		18 08.1	15			
	18 00.3	48.6		10.9	17			
	57.3	49.0		19 10.2	17			
	19 02.8	48.9		13.8	18			
	20 13.9	48.8		22.3	20			
	16.4	48.8		25.6	19			
	59.7	48.5		21 09.7	20			
	21 02.4	48.6		13.4	20			
	59.0	48.6		22 06.4	20			
	22 00.9	48.6		10.2	21			
	59.0	48.3		23 07.4	23			
	23 01.2	48.4		10.6	22			
57.6	48.3	16	0 06.5	22				
16 00.3	48.4		09.6	23				
58.1	48.4		1 08.0	22				
1 00.5	48.3		10.3	22				
58.9	48.3		2 06.1	23				
2 00.6	48.3		08.5	23				
58.9	48.2		3 08.1	24				
3 01.1	48.2		11.7	25				
59.5	48.2		4 05.3	26				
4 00.1	48.2		08.8	26				
59.9	48.4		5 09.1	31				
5 01.0	48.4		11.1	30				
57.8	49.7		6 04.2	24				
58.9	49.7		06.4	23				
7 04.1	48.9		7 13.0	27				
06.4	48.9		18.7	26				
59.2	47.4		8 08.1	17				
8 01.5	47.4		11.0	16				
59.5	46.7		9 07.7	06				
9 01.6	46.7		10.7	05				
10 01.8	46.0		10 11.7	11				
05.8	45.9		14.2	12				
58.7	46.6		11 11.5	11				
11 01.2	46.6		14.3	11				
12 01.4	49.1		12 08.6	23				
03.0	49.2		11.7	24				

No. 100. Karatu (唐津) 2

Lat.=33° 27' 03" N., Long.=129° 58' 08" E.

Height=11 m

Oct. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
16	h m 14 00.2	° ' 5 50.7
	02.1	50.6
	58.4	49.9
	15 00.1	49.9
	57.7	47.9
	59.5	47.7
	16 58.6	47.2
	17 00.3	47.1
	59.3	47.1
	18 01.5	47.0
	19 07.1	46.8
	09.3	46.9
	20 04.7	46.5
	07.3	46.5
	58.5	46.5
	21 01.3	46.6
	58.2	46.6
	22 00.7	46.6
	23 05.0	46.5
	07.8	46.5
	56.8	46.5
	59.4	46.6
17	0 57.3	46.6
	58.8	46.8
	1 57.4	46.6
	59.2	46.6
	2 57.2	46.4
	58.7	46.4
	3 57.2	46.1
	58.8	46.1
	4 58.4	46.3
	5 00.0	46.3
	57.3	46.6
	58.5	46.6
	6 57.1	46.8
	58.3	46.8
	7 57.8	45.8
	59.9	45.8
	8 58.5	44.5
	9 01.3	44.4
	57.7	44.9
	59.9	44.9
	10 58.3	46.2
	59.8	46.3
	11 58.5	49.1
	12 00.8	49.1
	57.6	50.7
	13 00.1	50.9
	14 03.9	50.0
	05.2	50.0

Date	Time	H
16	h m 14 08.1	r 32197
	10.6	95
	15 06.0	94
	09.7	93
	16 06.3	82
	09.3	79
	17 05.9	75
	09.1	75
	18 07.4	73
	11.0	73
	19 15.3	76
	18.7	75
	20 13.7	80
	16.4	79
	21 08.5	78
	11.4	78
	22 06.5	85
	09.8	85
	23 13.1	89
	17.0	88
17	0 09.4	88
	12.3	88
	1 05.0	85
	08.6	82
	2 06.8	85
	09.3	83
	3 04.7	85
	07.9	83
	4 06.3	88
	08.3	88
	5 06.9	87
	08.5	88
	6 02.8	88
	04.9	88
	7 04.8	83
	08.3	83
	8 06.4	81
	09.4	80
	9 07.8	68
	09.7	68
	10 05.6	61
	08.6	61
	11 04.5	66
	06.9	66
	12 05.9	83
	09.6	85
	13 06.0	202
	09.4	03
	14 10.0	15
	12.5	14

Date	Time	θ
16	h m 17 24.7	° ' 47 18.2
	27.6	18.2
	23 24.9	18.2
17	28.0	18.0
	5 23.3	18.1
	26.7	18.3
	11 26.7	17.1
	30.5	17.0

No. 101. Susaki (須崎)

Lat.=33° 24' 36" N., Long.=133° 17' 31" E.

Height=3 m

Nov. 1955

Inst. No. 21C Coil 21C Mag. A Cell 2 Resist. 1

Declination			Horizontal Intensity			Dip			
Date	Time	δ	Date	Time	H	Date	Time	θ	
29	h m 6 36.6	° ' 5 47.9	29	h m 7 27.3	r 31869	29	h m 11 25.1	° ' 46 49.0	
	38.5	48.1		30.0	69		28.1	49.8	
	57.9	48.8		8 05.1	91		17 18.2	50.1	
	7 01.1	48.8		08.1	92		21.8	50.8	
	57.2	49.3		9 05.5	79	30	23 27.0	50.3	
	59.2	49.0		08.8	79		31.2	50.3	
	8 58.0	47.1		10 06.5	69		5 19.8	50.7	
	9 00.1	46.9		09.5	69		22.3	50.9	
	58.8	46.3		11 10.1	62				
	10 01.0	46.3		13.5	63				
	11 01.1	47.4		12 05.4	57				
	03.4	47.4		09.6	57				
	57.6	48.2		13 11.1	52				
	59.4	48.1		14.6	49				
	13 03.7	49.1		14 04.8	50				
	05.8	49.1		07.5	50				
	57.7	49.8		15 06.1	57				
	59.6	49.8		09.7	60				
	14 58.6	49.5		16 05.0	62				
	15 00.7	49.5		07.5	62				
	57.1	49.2		17 07.8	60				
	59.3	49.1		10.8	60				
	16 59.7	48.2		18 03.5	61				
	17 02.3	48.2		06.7	61				
	55.0	48.0		19 11.8	60				
	57.1	48.0		15.6	60				
	19 04.6	48.3		20 21.9	75				
	06.5	48.4		25.1	75				
	20 12.2	48.6		21 12.1	67				
	14.2	48.6		15.2	68				
	21 02.4	49.3		22 09.2	66				
	05.0	49.3		13.3	66				
	58.5	49.2		23 11.4	65				
	22 01.4	49.2		15.4	68				
	58.6	49.2		0 06.9	69				
	23 03.0	49.2		10.3	68				
	57.4	49.2		1 11.0	71				
30	0 00.1	49.2	30	15.1	71				
	58.8	49.2		2 12.0	70				
	1 02.6	49.1		17.1	73				
	56.5	49.2		3 11.1	74				
	58.9	49.2		15.4	74				
	3 01.1	49.0		4 08.0	74				
	03.8	49.0		11.4	74				
	58.9	49.0		5 07.9	78				
	4 01.1	48.9		10.8	79				
	58.8	49.5		6 04.6	79				
	5 01.1	49.5		07.1	79				
	55.8	49.4		7 07.1	77				
				11.0	77				
				8 06.8	79				
				10.0	79				
				9 04.4	75				
				07.7	75				
		58.8			**				
		47.4							

*~** Mag. C

No. 102. Misaki (三 崎)

Lat.=33° 23' 03" N., Long.=132° 07' 33" E.

Height=2 m

Nov. 1955

Inst. No. 21C Coil 21C Mag. A Cell 2 Resist. 1

Declination

Date	Time	δ
20	^h ^m 15 32.2	[°] ['] 5 50.8
	34.5	50.7
	57.1	50.6
	59.7	50.6
	16 56.5	50.0
	58.9	50.0
	17 59.9	49.3
	18 01.7	49.3
	59.2	50.0
	19 02.8	50.0
	58.6	49.1
	20 00.9	49.0
	58.7	48.7
	21 00.9	48.8
	56.8	49.5
	59.3	49.3
	22 56.2	47.1
	58.9	47.2
	23 56.8	46.3
	59.1	46.3
21	0 57.2	46.2
	59.8	46.2
	1 59.0	47.8
	2 01.7	47.5
	3 01.6	48.8
	04.4	49.0
	59.1	51.3
	4 02.3	51.0
	59.6	51.1
	5 02.0	51.0
	57.7	52.6
	6 00.0	52.6
	59.4	50.5
	7 01.9	50.5
	58.5	50.5
	8 00.9	50.5
	55.9	50.2
	58.7	50.2
	9 59.5	49.1
	10 02.3	49.0
	56.6	48.3
	58.6	48.2
	11 59.6	48.8
	12 01.3	48.8
	59.6	50.2
	13 01.4	50.2
	55.9	50.4
	58.0	50.4
	14 57.5	50.0
	59.4	49.9
	16 00.1	49.1
	02.1	49.1
	55.3	48.4
	57.4	48.3

Declination

Date	Time	δ
21	^h ^m 17 56.3	[°] ['] 5 48.2
	57.8	48.1
	18 55.4	48.5
	57.3	48.5
	19 56.5	48.6
	58.6	48.6
	20 56.9	48.4
	59.2	48.4
	21 48.2	48.6
	50.5	48.6
22	23 04.6	48.7
	07.6	48.8
	52.5	48.8
	54.6	48.8
	1 07.6	48.9
	10.1	48.7
	3 17.5	48.7
	20.2	48.7
	6 35.1	48.7
	37.2	48.6

Horizontal Intensity

Date	Time	H
20	^h ^m 15 40.3	^r 31934
	43.5	32
	16 06.0	32
	08.9	32
	17 05.3	22
	09.0	20
	18 06.4	33
	09.3	33
	19 10.0	20
	14.6	21
21	20 07.9	10
	12.6	11
	21 32.0	82
	36.0	82
	22 07.3	63
	12.5	57
	23 06.6	46
	10.2	46
	0 05.2	61
	09.5	58
	1 06.9	45
	11.6	42
	2 08.4	57
	13.1	60
	3 12.0	73
	15.0	73
	4 08.1	93
	10.8	93
	5 10.5	71
	14.2	71
	6 06.2	73
	09.2	74
	7 08.2	68
	11.7	68
	8 05.7	74
	08.5	74
	9 04.1	71
	07.5	71
	10 13.1	68
	17.0	68
	11 04.7	68
	08.7	68
	12 07.6	71
	10.7	71
	13 07.3	68
	12.4	65
	14 04.7	65
	08.7	64
	15 04.7	62
	07.8	65
	16 10.5	72
	13.3	73
	17 01.9	71
	04.5	71

Horizontal Intensity

Date	Time		H
21	^h	^m	^r
	18	02.7	31975
		05.5	75
	19	02.5	75
		05.3	76
	20	03.4	78
		06.2	76
	21	04.6	79
		07.5	79
		57.8	79
	22	03.1	79
	23	13.7	84
		17.2	84
			84
22	0	02.8	82
		06.2	82
	1	18.0	85
		21.5	85
	3	26.0	90
		29.1	90

Dip

Date	Time		θ
20	^h	^m	[°] [']
	17	30.5	46 57.1
		46.9	55.8
21	23	32.3	56.4
		37.2	56.5
	5	30.1	54.8
		34.5	54.5
	11	19.5	54.7
		23.2	54.5
	16	23.7	54.8
		27.0	55.1
	23	30.0	54.4
		35.0	54.2

No. 103. Ōita (大 分)

Lat.=33° 13' 48" N., Long.=131° 35' 31" E.

Height=5 m

Oct. 1955

Inst. No. 21C Coil 21C Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
13	h m	° '
	18 37.8	* 5 35.6
	39.7	35.5
	19 01.8	35.7
	03.8	35.6
	57.4	35.3
	59.2	** 35.3
	21 21.3	34.7
	23.8	34.2
	22 01.1	34.4
	04.4	34.3
	57.6	34.1
	59.4	34.2
	23 59.3	34.5
	14 0 02.6	34.6
	57.0	34.0
	1 01.6	34.0
	2 00.9	34.1
14	05.1	34.1
	3 12.3	34.2
	15.6	34.3
	57.6	34.6
	4 01.1	34.7
	58.5	34.9
	5 01.9	34.9
	58.0	35.2
	6 02.4	35.1
	59.9	34.4
	7 04.2	34.3
	01.3	33.4
	8 03.5	33.2
	01.6	31.7
	9 04.2	31.8
	03.6	31.4
	10 05.6	31.5
	58.8	32.8
	11 02.4	33.0
	59.6	34.0
	12 02.9	34.1
	58.0	35.7
	13 01.5	35.7
	14 24.7	36.6
	26.8	36.5
	56.1	36.3
	59.5	36.4
	15 56.2	36.0
	59.5	36.0
	16 55.0	35.8
	57.2	35.9
	18 01.8	35.9
	04.7	35.9
	48.0	35.7
	50.3	35.6

Date	Time	H
13	h m	r
	18 48.6	32735
	54.3	32
	19 11.3	34
	15.4	32
	20 05.3	33
	09.4	33
	21 30.9	30
	35.2	30
	22 11.3	29
	16.7	28
	23 05.1	30
	09.6	32
	14 0 10.2	29
	15.8	31
	1 14.8	32
	21.1	32
	2 12.4	31
14	16.6	31
	3 22.0	31
	25.2	31
	4 07.2	31
	10.0	31
	5 08.8	30
	12.7	31
	6 15.9	39
	19.5	37
	7 13.8	35
	18.8	33
	8 10.6	29
	15.0	26
	9 10.6	21
	14.9	22
	10 11.1	14
	15.1	20
	11 11.6	21
	14.8	22
	12 09.8	31
	13.4	31
	13 09.0	33
	12.9	33
	14 31.7	34
	34.6	34
	15 06.9	33
	09.9	33
	16 12.4	25
	15.8	24
	17 04.6	13
	08.6	17
	18 11.6	21
	14.8	21

Date	Time	θ
13	h m	° '
	23 24.1	45 59.9
14	29.3	46 00.3
	5 28.6	00.7
	33.2	00.7
	11 22.7	01.7
	25.3	01.6
	17 24.2	03.2
	30.6	02.1

*~** Mag. A

No. 104. Uwazima (宇和島)

Lat.=33° 13' 02" N., Long.=132° 33' 08" E.

Height=1 m

Nov. 1955

Inst. No. 21C Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
18	15 36.8	5 44.0
		43.9
	16 03.9	42.8
		42.8
		42.7
		42.5
	17 56.8	42.3
		42.2
	19 21.1	42.0
		42.0
		42.3
	20 00.4	42.3
	21 07.9	42.0
		41.9
19		42.4
		42.3
		41.6
	22 59.0	41.6
	23 01.2	41.2
	0 01.1	41.2
		41.2
		41.1
	1 02.0	41.1
		40.3
	2 02.0	40.3
		42.4
	3 12.4	38.3
		38.3
		41.9
	4 02.7	42.0
	5 00.6	41.5
		41.5
	6 14.0	44.2
		44.3
	7 00.5	43.8
		44.1
		43.4
	8 01.7	43.5
		44.7
		44.0
	9 53.5	44.0
		44.2
	10 59.5	43.6
	11 02.9	44.0
		43.6
		43.4
	12 57.7	44.7
	13 00.2	44.6
	14 03.4	44.6
		44.6
		44.4
		44.4
	15 26.3	43.9
		43.8

Date	Time	H
	h m	r
18	16 18.5	32009
		12
		02
	17 14.6	31999
		18.3
	18 17.3	32010
		13
		22
	19 31.3	21
		34.6
	20 06.7	21
		09.9
	21 15.8	21
		19.8
19	22 04.9	28
		07.7
	23 06.4	20
		09.0
	0 10.3	26
		13.2
	1 09.1	28
		13.0
	2 38.9	76
		42.9
	3 24.1	17
		33.4
	4 09.1	05
		12.6
	5 10.7	54
		14.6
	6 23.5	53
		29.1
	7 10.3	54
		15.0
	8 07.7	55
		11.2
	9 05.7	69
		10.8
	10 02.1	67
		05.7
	11 10.5	81
		10.8
	12 04.4	80
		07.2
	13 06.6	90
		09.1
	14 11.1	92
		14.1
		59.3
	15 02.0	07
		33.2
		35.8

Date	Time	θ
	h m	° '
18	17 31.1	46 39.6
		34.9
		39.9
19	23 19.3	38.5
		22.7
	5 56.9	39.7
		41.9
	6 00.8	41.6
	11 24.3	40.4
		28.4
		40.0

No. 105. Yanagawa (柳 川)

Lat.=33° 09' 40" N., Long.=130° 24' 32" E.

Height=3 m

Nov. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	$^{\circ}$ '
4	8 58.5	5 35.8
	9 02.3	36.0
	58.9	36.5
	10 01.4	36.6
	11 00.7	39.0
	03.1	39.2
	12 03.3	40.8
	06.1	41.0
	13 00.4	42.4
	03.6	42.8
	59.7	43.6
	14 02.1	43.7
	58.5	42.2
	15 03.9	42.3
	59.9	42.2
	16 01.3	42.2
	58.0	40.4
	59.8	40.4
	18 00.5	41.4
	02.2	41.2
	57.3	41.0
	19 01.6	40.8
	59.3	40.5
	20 01.5	40.4
	58.4	40.5
	21 00.9	40.5
	59.8	40.8
	22 02.2	40.8
	59.9	40.9
	23 02.5	40.9
	58.4	40.5
	5 0 01.4	40.6
	59.3	40.9
	1 01.5	40.9
	59.0	40.9
	2 01.8	40.9
	59.5	40.6
	3 01.7	40.6
	59.4	40.6
	4 01.0	40.6
	5 00.5	40.9
	01.9	41.0
	6 02.9	42.4
	04.6	42.6
	7 00.9	42.2
	02.7	42.2
	8 02.1	41.1
	05.3	40.9
	9 00.9	39.6
	03.2	39.7
	10 04.4	40.4
	06.6	40.4
	11 02.0	42.2
	04.5	42.2
	12 00.5	44.0
	03.0	44.2

Date	Time	H
	h m	r
4	9 12.7	32309
	16.3	06
	10 07.8	294
	12.8	91
	11 04.9	92
	08.4	90
	12 11.8	89
	14.8	93
	13 05.3	90
	13.7	89
	14 11.0	76
	15.0	73
	15 15.9	59
	20.0	56
	16 06.9	92
	09.2	91
	17 07.8	306
	11.2	03
	18 08.0	04
	10.9	04
	19 11.0	00
	14.6	299
	20 10.2	86
	14.9	88
	21 09.6	94
	13.6	96
	22 09.0	302
	12.9	04
	23 08.3	04
	12.2	04
	5 0 10.4	08
	14.6	08
	1 08.5	10
	12.1	11
	2 06.1	11
	10.2	12
	3 11.9	10
	14.2	10
	4 04.5	11
	08.2	11
	5 07.4	14
	10.4	15
	6 09.2	19
	11.6	20
	7 10.6	00
	13.8	00
	8 12.4	299
	16.0	96
	9 08.8	87
	12.4	87
	10 13.0	80
	16.7	81
	11 10.5	79
	14.2	85
	12 08.8	89
	13.5	86

Date	Time	θ
	h m	$^{\circ}$ '
4	11 31.1	46 48.3
	36.8	47.1
	17 21.8	48.8
	26.4	48.8
5	23 27.9	49.4
	44.7	49.3
	5 18.8	48.6
	21.5	48.6
	11 22.8	48.2
	28.9	48.1

No. 106. Haiki (早 岐)
Lat.=33° 07' 51" N., Long.=129° 48' 51" E.
Height=20 m

Oct. 1955

Inst. No. 21

Coil 21A

Mag. B

Cell 2

Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
19	8 16.1	5 35.6
	19.1	35.5
	59.3	35.2
	9 01.1	35.3
	10 00.6	35.2
	02.6	35.1
	58.0	37.2
	11 01.0	37.2
	12 12.4	39.3
	13.9	39.4
	13 00.2	40.9
	01.9	40.9
	14 00.7	41.1
	05.6	41.5
	15 00.2	41.0
	02.2	40.9
	56.3	39.7
	58.4	39.7
	16 53.3	38.8
	54.9	38.7
	17 55.6	38.6
	57.4	38.6
	18 59.0	38.7
	19 01.9	38.7
	59.3	38.6
	20 01.0	38.6
	58.9	38.5
	21 01.5	38.5
	56.9	38.5
	59.5	38.5
	22 58.5	38.3
	23 00.8	38.3
	58.2	38.1
20	0 00.9	38.1
	58.1	38.2
	1 00.4	38.2
	57.4	38.2
	2 00.2	38.2
	58.2	38.2
	3 00.4	38.2
	55.3	38.1
	57.4	38.0
	4 57.0	37.7
	59.9	37.7
	5 57.5	37.8
	59.6	37.9
	6 58.6	38.0
	7 01.4	37.9
	59.1	36.5
	8 00.8	36.5
	58.4	36.3
	9 00.8	36.3
	59.2	36.9
	10 02.7	36.7
	57.9	37.7
	59.7	37.7
	12 07.4	40.1
	16.8	40.3
	18.8	40.4
	56.9	41.0
	59.2	40.9

Date	Time	H
	h m	°
19	8 27.2	32416
	30.9	20
	36.5	15
	39.6	17
	9 08.1	07
	11.7	09
	14.4	11
	10 11.1	06
	20.8	06
	11 12.1	15
	17.0	13
	12 19.7	22
	24.4	24
	13 07.9	35
	11.0	37
	14 12.2	44
	15.6	35
	24.9	29
	15 06.6	29
	11.4	29
	16 04.7	26
	09.6	25
	59.4	24
	17 01.9	25
	18 04.6	23
	13.1	24
	19 07.0	19
	10.2	19
	20 07.3	27
	10.8	27
	17.6	20
	22.7	21
	21 08.8	21
	13.8	21
	22 13.5	18
	21.7	20
	23 06.9	18
	09.8	24
20	0 09.3	23
	13.0	25
	1 05.8	26
	08.6	25
	2 04.5	23
	08.1	24
	3 04.3	23
	08.3	24
	4 04.0	19
	08.6	21
	5 06.6	22
	14.9	22
	6 05.5	21
	08.4	21
	7 09.4	27
	13.3	28
	8 07.5	35
	13.5	37
	9 06.9	32
	11.0	35
	10 11.3	41
	17.4	38
	11 07.2	29
	14.0	30
	12 24.4	27
	27.2	27
	13 03.8	29
	08.1	29

Date	Time	θ
	h m	° '
19	11 50.0	46 47.6
	55.4	48.0
	17 19.5	52.1
	23.0	48.0
	25.1	48.0
20	23 24.3	48.2
	28.1	48.1
	5 30.5	49.0
	35.1	48.9
	11 36.8	47.5
	40.5	47.4

No. 107. Mitune (三 根)

Lat.=33° 06' 56" N., Long.=139° 48' 18" E.

Height=54 m

May 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
22	h m 8 58.3	° ' 7 23.2
	9 02.3	23.1
	10 14.8	23.7
	17.7	24.1
	57.3	25.2
	11 00.9	25.3
	12 01.7	26.1
	04.4	26.2
	58.0	26.8
	13 00.9	26.8
	58.3	26.8
	14 01.1	26.8
	58.8	27.0
	15 02.3	27.0
	56.5	26.6
	16 00.9	26.5
	17 01.3	25.8
	05.9	25.8
	18 13.7	25.0
	18.2	25.1
	54.0	25.0
	56.7	24.9
	19 59.2	25.2
	20 01.9	24.3
	22 04.5	25.2
	07.7	25.2
	23 01.5	25.1
	04.5	25.1
23	0 00.7	25.1
	03.8	25.1
	57.7	24.9
	1 01.6	24.8
	56.4	24.5
	59.4	24.4
	2 56.1	24.1
	3 00.3	24.5
	56.3	24.5
	59.4	24.4
	4 55.6	23.8
	58.8	24.3
	6 13.9	21.7
	16.7	21.7
	59.4	20.8
	7 03.0	20.7
	58.0	20.4
	8 01.7	20.5
	58.0	21.7
	9 01.2	21.7
	10 00.3	23.4
	03.8	23.3

Date	Time	H
22	h m 9 15.9	° 30522
	21.3	23
	10 26.9	32
	33.1	32
	11 08.7	37
	12.9	39
	12 11.3	41
	14.5	42
	13 12.0	47
	16.4	44
	14 08.7	46
	13.9	46
	15 12.4	49
	17.3	48
	16 11.1	43
	16.0	42
	17 14.4	32
	16.9	29
	18 28.1	29
	32.9	31
	19 05.9	32
	11.5	30
	20 15.2	27
	21.1	28
	22 25.7	27
	31.2	27
	23 13.5	32
	17.4	31
23	0 11.9	32
	16.8	32
	1 12.9	29
	17.5	29
	2 09.7	29
	14.6	30
	3 08.0	32
	12.3	31
	4 08.3	28
	14.0	27
	5 10.1	30
	13.8	29
	6 24.3	20
	28.8	19
	7 11.5	14
	17.0	13
	8 12.1	15
	16.8	15
	9 09.0	13
	13.3	13
	10 15.2	23
	20.0	23

Date	Time	θ
22	h m 11 34.0	° ' 45 18.4
	38.8	18.4
	17 30.9	19.6
	35.0	19.5
	23 33.2	19.3
23	40.4	19.7
	48.5	20.0
	5 43.4	20.5
	49.7	20.3

No. 108. Ōgagō (大賀郷)

Lat.=33° 06' 02" N., Long.=139° 47' 13" E.

Height=80 m

May 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time		δ	
	h	m	°	'
28	10	11.2	6	29.3
		17.6		29.3
		59.8		29.9
	11	03.9		29.9
	12	07.7		33.0
		12.2		33.5
	13	02.7		32.1
		08.4		31.8
		58.7		32.1
	14	04.4		32.1
		59.9		31.5
	15	04.7		31.7
	16	02.3		30.8
		06.6		30.9
		59.1		29.3
	17	02.1		29.3
		57.5		29.1
	18	00.7		29.0
	19	15.6		29.0
		22.1		28.9
		58.6		27.2
	20	03.5		26.9
		58.1		27.4
29	21	02.3		27.6
	22	00.0		28.3
		06.7		28.2
		55.1		28.5
		58.8		28.5
	0	04.4		28.1
		08.5		28.4
		59.1		27.8
	1	03.1		27.9
		57.2		27.5
	2	00.7		27.6
		57.2		27.5
	3	01.1		27.3
		56.9		27.4
	4	03.9		27.2
		56.8		27.4
	5	01.2		27.3
		58.5		26.6
	6	03.3		26.6
	7	00.7		25.2
		03.7		25.1
		59.9		25.3
	8	03.3		25.0
		59.9		25.5
	9	11.1		25.5
		58.6		25.9
	10	03.5		25.9
		57.3		27.2
	11	01.1		27.3
		52.1		28.4
		55.7		28.6

Date	Time		H
	h	m	r
28	10	29.8	31794
		34.3	94
	11	11.3	800
		16.2	02
	12	23.3	01
		27.5	01
	13	19.5	09
		24.2	12
	14	13.2	07
		19.5	08
	15	14.2	797
		18.3	98
	16	27.8	804
		34.5	03
	17	09.4	07
		13.9	06
	18	09.4	795
		14.1	97
	19	33.0	800
		37.3	01
	20	11.4	36
		15.5	38
	21	11.0	15
29		14.9	13
	22	15.3	06
		20.3	09
	23	13.2	11
		19.3	13
	0	24.4	15
		29.1	16
	1	13.0	16
		18.5	15
	2	09.2	11
		13.9	11
	3	09.3	12
		14.0	10
	4	14.6	10
		19.3	10
	5	09.7	15
		13.7	16
	6	14.5	19
		21.1	19
	7	13.6	10
		19.4	11
	8	13.6	06
		17.8	05
	9	27.3	09
		32.9	04
		39.3	03
	10	11.6	05
		15.5	05
	11	08.2	12
		12.5	12

Date	Time		θ	
	h	m	°	'
28	11	29.2	44	24.2
		32.8		24.4
	17	26.1		26.6
		30.5		26.5
29	23	40.6		24.9
		46.6		24.9
	5	26.7		25.8
		30.4		25.6

No. 109. Nakanogō (中之郷)

Lat.=33° 03' 45" N., Long.=139° 48' 59" E.

Height=125 m

May 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Date	Time	δ
25	^h ^m	[°] [']
	11 52.8	4 05.3
	56.0	05.3
	13 03.0	06.1
	06.3	06.1
	14 02.0	05.6
	05.1	05.5
	59.1	04.9
	15 02.0	04.9
	16 00.3	04.2
	04.1	04.1
	56.7	03.5
	17 02.9	03.6
	56.5	03.5
	18 00.1	03.3
	59.3	03.5
	19 02.6	03.6
	58.3	03.4
	20 01.6	03.4
	59.4	03.5
	21 03.5	03.5
	58.8	03.3
	22 01.8	03.3
	58.9	03.2
26	23 01.8	03.3
	0 00.8	02.5
	03.5	02.4
	58.8	01.4
	1 02.7	01.3
	58.8	00.1
	2 02.7	00.1
	58.7	3 59.0
	3 02.9	59.0
	4 02.2	4 00.0
	05.9	3 59.9
	09.6	59.7
	57.6	4 01.5
	5 00.2	01.2
	6 13.8	00.0
	17.1	00.1
	58.7	3 59.7
	7 01.9	4 00.0
	58.4	01.6
	8 01.5	01.1
	31.7	04.3
	34.9	04.3
	58.2	05.9
	9 00.9	06.2
	10 02.5	07.2
	05.7	07.1
	58.4	07.1
	11 02.0	07.1
	59.0	08.2
	12 02.4	08.3
	13 06.6	07.9

Declination

Date	Time	δ
26	^h ^m	[°] [']
	13 09.8	4 08.1
	59.1	08.6
	14 03.8	08.6
	15 00.9	07.1
	04.1	07.0
	58.3	06.6
	16 00.8	06.6
	59.9	05.9
	17 02.8	05.8
	49.0	04.1
	51.7	04.1

Horizontal Intensity

Date	Time	H
25	^h ^m	^r
	12 08.0	30880
	12.0	80
	13 13.6	80
	17.9	78
	14 13.7	79
	18.8	77
	15 08.5	75
	12.4	75
	16 14.5	71
	19.1	71
	17 11.6	65
	18.2	67
	18 13.2	67
	19.1	64
	19 10.9	67
	15.3	67
	20 09.1	70
	13.4	69
	21 16.4	69
	19.6	69
	22 13.2	72
	18.3	72
	23 11.9	69
26	16.7	70
	0 14.3	910
	19.8	09
	1 19.6	14
	24.3	13
	2 08.4	24
	15.2	28
	3 13.6	24
	18.1	17
	4 23.2	872
	29.4	68
	5 16.1	57
	20.4	56
	6 33.1	12
	38.4	06
	7 12.6	786
	16.6	83
	8 09.6	72
	14.1	74
	9 09.7	70
	15.1	70
	10 16.8	94
	22.3	98
	11 09.3	801
	13.3	03
	12 13.2	782
	19.1	71
	13 21.1	95
	26.7	94
	14 12.5	88
	17.0	89

Horizontal Intensity

Date	Time		H
26	^h	^m	^r
	15	11.5	30783
		15.4	84
	16	07.8	99
		12.3	98
	17	10.0	89
		16.4	89

Dip

Date	Time		θ	
25	^h	^m	[°]	[']
	17	22.9	46	26.5
		28.9		26.8
	23	29.9		27.9
		35.4		27.7
		41.5		26.5
		47.8		26.9
26	5	37.6		28.1
		42.7		28.2
	11	25.8		31.1
		29.8		30.8

No. 110. Nakamura (中 村)

Lat.=32° 58' 02" N., Long.=132° 56' 30" E.

Height=4 m

Nov. 1955

Inst. No. 21C Coil 21C Mag. A Cell 2 Resist. 1

Declination

Date	Time	δ
24	h m 9 16.2	° ' 5 34.2
	18.1	34.2
	59.6	34.2
	10 01.8	34.2
	58.1	34.9
	11 00.3	34.9
	57.6	36.1
	59.4	36.0
	12 53.7	37.6
	56.1	37.6
	13 53.8	38.1
	55.3	38.1
	14 57.5	38.1
	59.2	38.1
	15 57.8	37.7
	59.8	37.7
	16 58.2	37.4
	59.8	37.4
	17 58.1	37.0
	18 00.2	37.0
	57.2	37.0
	59.2	36.9
	19 59.7	37.2
	20 02.0	37.2
	58.2	36.0
	21 00.1	36.0
	58.8	36.9
	22 00.9	36.9
	55.5	36.5
	57.5	36.4
	23 57.2	36.1
	59.0	36.1
25	0 58.9	36.1
	1 00.8	36.1
	58.9	36.1
	2 01.1	36.1
	52.2	36.3
	54.4	36.2
	3 55.0	36.2
	57.3	36.1
	4 55.7	36.8
	58.3	36.7
	5 55.7	37.0
	58.4	37.0
	6 58.4	37.0
	7 00.8	37.0
	8 07.3	35.8
	09.6	35.9
	9 08.1	36.0
	10.2	36.0
	10 05.2	35.7
	07.6	35.6
	11 03.0	35.9
	05.1	35.9

Declination

Date	Time	δ
25	h m 12 02.0	° ' 5 36.1
	03.6	36.1
	13 06.9	36.8
	08.3	37.0
	14 18.5	37.6
	21.0	37.5

Horizontal Intensity

Date	Time	H
24	h m 9 28.3	° 32103
	32.1	03
	10 06.6	01
	10.0	00
	11 05.6	03
	10.0	03
	12 04.7	02
	07.1	03
	13 01.3	093
	04.3	92
	59.8	92
	14 02.5	92
	15 03.8	97
	06.4	97
	16 04.5	89
	07.2	89
	17 04.7	84
	08.2	84
	18 05.6	86
	08.1	86
	19 04.7	92
	07.6	92
	20 06.5	86
	09.9	86
	21 05.6	88
	08.3	88
	22 05.8	83
	09.0	81
	23 03.4	80
	06.2	81
25	0 04.5	83
	07.3	81
	1 05.6	81
	08.5	80
	2 06.7	78
	09.8	79
	3 01.3	80
	05.0	81
	4 02.5	92
	06.3	92
	5 15.0	95
	6 06.1	97
	10.7	96
	7 08.6	102
	11.2	02
	8 16.7	06
	20.2	07
	9 15.4	00
	19.4	099
	10 13.7	96
	16.6	95
	11 09.6	92
	12.1	92
	12 14.0	87

Horizontal Intensity

Date	Time		H
25	^h	^m	^r
	12	16.2	32086
	13	13.6	86
		16.3	86
	14	26.0	89
		29.0	89

Dip

Date	Time		θ	
24	^h	^m	^o	[']
	11	21.2	46	16.9
		24.6		16.9
	17	27.9		19.0
		31.1		18.9
25	23	17.2		19.5
		20.6		19.4
	5	39.6		18.2
		43.1		18.1

No. 111. Saeki (佐 伯)

Lat.=32° 57' 32" N., Long.=131° 54' 00" E.

Height=1 m

Oct. 1955

Inst. No. 21C Coil 21C Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
22	^h 18 ^m 01.9	^o 5 ['] 29.1
	04.9	29.1
	19 00.5	29.3
	03.6	29.5
	59.2	29.3
	20 00.2	29.2
	51.2	29.8
	54.3	29.7
	21 52.7	29.0
	55.0	29.0
	22 54.4	28.1
	56.6	28.2
	23 58.9	28.1
	0 01.3	28.1
	59.6	27.5
	1 01.8	27.2
	57.5	28.0
	59.2	28.0
23	2 58.8	27.3
	3 03.7	27.3
	58.7	27.5
	4 02 0	27.5
	58.3	28.0
	5 01.6	28.0
	54.8	28.1
	58.0	28.1
	6 54.6	28.1
	57.3	28.1
	7 57.5	27.5
	8 02.6	27.4
	58.5	27.7
	9 01.4	27.8
	10 09.4	28.5
	11.7	28.6
	55.4	29.2
	58.3	29.3
	11 57.0	30.5
	59.2	30.5
	12 49.2	31.5
	51.6	31.5
	14 05.9	31.4
	08.1	31.4
	54.9	30.3
	57.6	30.1
	15 54.8	29.6
	58.5	29.5
	16 56.3	28.7
	59.8	28.5
	17 54.5	29.0
	57.7	28.9

Date	Time	H
22	^h 18 ^m 12.9	^r 32120
	17.8	23
	19 08.4	17
	12.0	14
	20 08.3	06
	13.4	06
	21 02.3	06
	06.5	06
	22 02.5	097
	08.6	99
	23 03.5	110
	09.4	09
	0 08.3	11
	13.1	13
	1 07.6	20
	12.4	17
	2 09.3	16
	14.4	17
23	3 09.4	20
	12.4	20
	4 09.0	23
	14.0	23
	5 07.6	26
	10.7	26
	6 04.3	23
	07.6	24
	7 02.6	29
	05.3	31
	8 08.4	25
	11.2	26
	9 06.3	22
	09.6	22
	10 19.4	23
	23.4	23
	11 05.1	29
	08.7	30
	12 05.9	37
	11.3	37
	58.2	40
	13 01.2	40
	14 14.2	43
	17.3	46
	15 02.9	46
	05.7	46
	16 05.4	34
	07.7	35
	17 05.1	26
	07.9	27
	18 06.1	25
	08.8	25

Date	Time	θ
22	^h 23 ^m 29.1	^o 46 ['] 30.5
	33.9	30.4
23	5 21.6	30.5
	25.0	30.5
	11 17.9	29.4
	22.5	28.6
	17 17.5	29.9
	20.9	29.8

No. 112. Miyazi (宮 地)

Lat.=33° 56' 32" N., Long.=131° 07' 00" E.

Height=520 m

Oct. 1955

Inst. No. 21C Coil 21C Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	^h ^m	[°] [']
17	9 50.2	5 11.7
	54.2	11.7
	11 04.8	14.6
	12.3	14.0
	12 10.6	16.4
	13.2	16.6
	13 00.1	17.2
	02.8	17.3
	56.6	17.0
	14 00.3	16.9
	59.3	15.2
	15 02.3	15.0
	57.3	14.0
	16 00.8	13.8
	55.5	13.1
	58.3	13.0
	17 57.8	13.6
	18 01.5	13.6
	19 10.5	13.5
	13.7	13.5
	57.5	13.5
	20 01.8	13.5
	22 11.4	14.0
	15.7	13.9
	58.4	13.8
	23 01.7	13.8
18	0 02.2	13.6
	05.5	13.8
	56.6	13.4
	59.7	13.4
	2 08.4	13.6
	12.3	13.6
	3 05.1	13.2
	07.1	13.2
	4 08.1	13.1
	10.5	12.9
	5 11.1	13.1
	14.8	13.2
	56.8	13.2
	59.1	13.1
	6 59.1	13.6
	7 02.3	13.6
	58.0	12.9
	8 01.2	13.0
	57.1	13.1
	9 00.5	13.1
10	58.4	12.3
	01.8	12.3
	56.1	13.6
	59.0	13.6

Date	Time	H
	^h ^m	^r
17	10 03.8	32166
	09.1	67
	11 23.4	80
	29.1	79
	12 22.2	96
	26.5	93
	13 09.9	206
	13.0	06
	14 08.1	16
	12.1	19
	15 15.4	14
	18.7	14
	16 07.8	05
	11.2	07
	17 05.7	02
	09.5	00
	18 07.0	193
	10.0	92
	19 19.2	94
	22.4	94
	20 09.4	93
	13.6	93
	22 23.6	85
	28.0	85
	23 08.4	83
	12.2	83
18	0 12.1	83
	19.5	83
	1 06.1	84
	09.0	84
	2 21.0	86
	24.4	85
	3 13.8	88
	17.1	84
	4 15.9	80
	19.0	80
	5 20.7	81
	24.7	81
	6 06.5	85
	09.3	82
	7 08.5	91
	12.1	89
	8 08.8	93
	12.7	93
10	9 09.0	80
	13.6	79
	10 10.5	77
	13.8	77
11	06.3	86
	09.5	86

Date	Time	θ
	^h ^m	[°] [']
17	11 42.3	46 40.8
	46.6	40.0
	17 21.1	40.1
	24.6	40.6
	23 23.0	40.6
18	26.6	40.8
	5 38.2	41.0
	42.0	41.2

No. 113. Kumamoto (熊本)

Lat.=32° 48' 47" N., Long.=130° 43' 38" E.

Height=20 m

Nov. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Date	Time	δ
8	h m	° '
	10 58.8	5 39.9
	11 00.7	39.9
	12 01.4	41.4
	04.1	41.6
	58.2	42.8
	13 01.1	42.9
	14 01.6	44.8
	02.8	44.8
	58.4	44.1
	15 00.3	44.2
	57.7	43.1
	16 00.4	43.0
	59.1	42.4
	17 00.7	42.4
	57.3	42.8
	59.4	42.8
	19 03.9	42.8
	07.6	43.1
	57.3	42.6
	20 00.2	42.6
	59.0	42.7
	21 01.8	42.7
9	h m	° '
	59.4	42.6
	22 01.6	42.4
	23 00.5	42.5
	03.0	42.5
	59.1	41.0
	0 04.1	40.8
	59.6	39.6
	1 02.9	39.6
	58.7	40.4
	2 00.7	40.5
	58.3	41.6
	59.8	41.6
	3 59.7	42.3
	4 01.9	42.4
	58.2	42.6
	5 01.2	42.6
	6 00.3	42.5
	02.1	42.5
	7 00.5	41.5
	02.4	41.5
	59.2	41.9
	8 01.3	41.9
	58.7	43.4
	9 01.0	43.3
	58.8	41.5
	10 01.2	41.8
	59.3	42.1
	11 02.2	42.3
	57.1	43.0
	12 00.0	43.0
	13 00.5	43.9
	03.4	44.1

Declination

Date	Time	δ
9	h m	° '
	14 02.5	5 45.3
	04.6	45.3
	57.5	45.0
	59.6	45.1

Horizontal Intensity

Date	Time	H
8	h m	γ
	11 08.6	32249
	12.2	47
	12 16.7	54
	20.0	51
	13 07.6	50
	11.7	49
	14 07.0	50
	10.7	48
	15 06.2	42
	09.5	44
	16 08.2	34
	10.7	34
	17 05.4	23
	08.0	23
	18 04.7	14
	07.9	13
	19 20.8	17
	24.7	18
	20 08.2	26
	11.5	26
	21 12.6	34
	16.2	34
	22 10.1	32
9	h m	γ
	13.8	30
	23 17.0	23
	20.4	24
	0 16.2	54
	19.3	53
	1 10.5	46
	13.7	46
	2 06.8	48
	09.6	48
	3 04.4	46
	07.1	46
	4 07.1	46
	10.0	46
	5 05.9	40
	09.4	43
	6 07.2	42
	10.0	43
	7 09.2	43
	13.7	41
	8 08 6	34
	12.8	34
	9 06.2	29
	09.6	28
	10 12.4	26
	15.4	25
	11 09.5	28
	13.3	26
	12 08.7	26
	12.3	28
	13 11.3	42
	14.8	43

Horizontal Intensity

Date	Time		H
	h	m	r
9	14	14.2	32226
		17.8	21
		05.0	21
	15	08.0	22

Dip

Date	Time		θ	
	h	m	$^{\circ}$	'
8	11	42.3	46	15.5
		44.6		15.4
	17	22.9		16.9
		25.2		17.1
	23	36.6		18.2
		39.4		18.0
9	5	19.8		17.6
		22.9		17.4
	12	33.6		17.7
		36.9		17.8

No. 114. Simabara (島 原)

Lat.=32° 47' 14" N., Long.=130° 22' 07" E.

Height=10 m

Oct., Nov. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
31	^h 17 ^m 01.1	[°] 5 ['] 36.8
	02.6	36.7
	19 01.4	35.5
	03.0	35.5
	59.7	35.8
	20 01.6	35.9
	59.5	35.2
	21 01.5	35.3
	59.4	34.3
	22 02.1	34.3
	59.8	34.2
	23 03.3	34.1
	59.4	34.1
	1 0 01.5	34.1
	1 00.2	34.3
	02.0	34.5
	2 00.8	34.7
	02.3	34.9
	3 00.9	34.3
	02.2	34.1
1	59.9	35.0
	4 02.8	34.9
	58.1	35.1
	5 01.6	35.1
	59.9	36.5
	6 02.1	36.5
	58.6	36.5
	7 00.6	36.8
	58.5	35.3
	8 00.0	35.1
	58.6	33.5
	9 00.2	33.5
	58.6	34.6
	10 00.5	34.7
	57.1	35.5
	59.0	35.7
	11 58.9	36.6
	12 01.0	36.5
	13 00.8	37.5
	03.0	37.7
	58.9	39.1
	14 01.2	39.1
	15 02.1	37.3
	04.0	37.3
	16 00.3	36.7
	01.8	36.5
	59.5	35.3
	17 01.2	35.1
	58.7	35.3
	18 00.0	35.3
	19 05.7	35.5
	07.3	35.5

Date	Time	H
31	^h 17 ^m 09.8	^r 32309
	15.8	07
	19 07.8	19
	12.1	18
	20 09.3	22
	12.4	23
	21 11.9	30
	15.6	30
	22 09.1	40
	13.0	42
	23 10.2	38
	14.2	38
	1 0 06.9	16
	09.8	15
	1 07.6	06
	10.5	05
	2 06.6	29
	08.7	31
	3 07.3	39
	10.4	39
1	4 09.0	33
	11.9	32
	5 06.4	44
	09.5	44
	6 08.8	38
	12.5	38
	7 04.5	34
	07.9	36
	8 06.1	27
	10.6	27
	9 04.8	06
	07.4	06
	10 05.3	296
	08.0	95
	11 10.4	315
	13.5	15
	12 10.8	24
	13.6	24
	13 08.5	07
	11.1	04
	14 08.5	12
	12.2	12
	15 09.8	07
	12.5	07
	16 07.2	04
	10.8	05
	17 05.8	09
	08.4	09
	18 06.4	16
	09.2	15
	19 17.2	13
	22.4	13
	35.0	16
	39.3	16

Date	Time	θ
31	^h 18 ^m 15.1	[°] 46 ['] 19.4
	21.5	19.3
1	23 28.2	19.2
	36.3	19.1
	5 21.3	18.4
	24.7	18.2
	11 25.8	19.8
	35.2	19.8
	17 23.0	21.7
	26.0	21.9

No. 115. Hukue (福江)

Lat.=32° 41' 51" N., Long.=128° 50' 29" E.

Height=10 m

Oct. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	^h ^m	[°] [']
23	9 05.8	5 30.2
	07.8	30.2
	58.3	30.5
	10 00.8	30.5
	58.2	31.1
	11 00.3	31.1
	58.5	32.2
	12 00.6	32.2
	57.8	33.6
	13 00.3	33.6
	56.7	33.6
	59.2	33.5
	14 57.6	32.2
	59.8	32.0
	15 57.7	31.5
	16 00.6	31.5
	58.1	29.9
	59.9	29.9
	18 02.5	30.3
	04.7	30.3
	19 00.2	30.5
	02.2	30.6
	57.7	30.8
	59.9	30.8
	20 58.6	31.5
	21 01.6	31.6
	22 01.5	31.6
	05.2	31.5
	58.8	31.7
	23 02.0	31.7
	59.6	31.5
	24 0 02.1	31.5
	58.2	30.9
	1 00.8	30.9
	57.3	30.8
	58.8	30.8
	2 23.8	28.3
	27.1	28.3
	41.7	28.4
	43.8	28.2
	58.1	28.7
	3 00.9	28.3
	4 01.3	28.8
	04.0	28.8
	5 01.5	28.7
	03.6	28.7
	58.5	29.3
	6 00.2	29.3
	58.4	29.7
	7 00.8	29.6
	59.2	28.8
	8 00.7	28.6
	59.1	27.6
	9 01.7	27.6
	57.6	27.2
	59.5	27.2
	10 58.0	27.8
	59.6	27.8
	12 00.4	29.6
	01.7	29.7

Date	Time	H
	^h ^m	^r
23	9 20.6	32701
	24.1	00
	10 07.6	698
	10.7	97
	11 05.7	704
	08.8	05
	12 05.5	11
	09.4	11
	13 05.4	16
	09.2	18
	14 11.4	21
	14.1	21
	15 09.2	17
	14.0	15
	16 33.3	03
	36.0	03
	17 08.0	05
	10.9	04
	18 14.5	02
	17.8	02
	19 12.0	01
	15.2	01
	20 14.6	699
	18.5	99
	21 09.1	91
	13.7	89
	22 12.5	92
	16.5	92
	23 09.6	99
	13.6	99
	24 0 09.2	96
	12.2	96
	1 06.7	712
	11.2	11
	2 11.4	03
	14.2	00
	3 14.3	697
	17.3	96
	4 08.9	701
	12.0	01
	5 09.3	08
	12.6	11
	6 03.5	12
	07.2	12
	7 08.5	17
	12.2	17
	8 10.0	13
	12.9	11
	9 09.0	09
	13.9	10
	10 08.9	11
	11.7	13
	11 05.2	20
	08.9	20
	12 06.7	27
	10.5	27

Date	Time	θ
	^h ^m	[°] [']
23	11 31.2	45 48.9
	34.0	48.8
	17 33.6	53.0
	41.0	53.0
24	23 23.6	50.1
	27.3	49.9
	5 25.7	51.1
	28.4	51.1
	11 25.2	51.5
	28.0	51.7

No. 116. Tomie (富江) 1

Lat.=32° 36' 54" N., Long.=128° 45' 52" E.

Height=2 m

Oct. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Date	Time	δ
25	h m 11 14.2	° ' 5 00.8
	16.6 00.8	00.8
	12 07.2 01.9	01.9
	09.3 01.8	01.8
	13 00.6 02.6	02.6
	03.8 02.5	02.5
	59.0 02.4	02.4
	14 01.1 02.4	02.4
	15 02.9 01.1	01.1
	04.8 01.1	01.1
	59.0 01.7	01.7
	16 01.0 01.6	01.6
	17 01.1 01.9	01.9
	02.9 01.8	01.8
	18 01.1 02.1	02.1
	04.1 02.3	02.3
	19 02.3 03.7	03.7
	04.1 03.7	03.7
	20 12.5 01.9	01.9
	14.7 01.9	01.9
	58.5 03.0	03.0
26	21 00.8 03.3	03.3
	22 00.1 57.2	4 57.2
	02.3 57.1	57.1
	58.0 58.5	58.5
	23 00.4 58.4	58.4
	58.9 00.7	5 00.7
	0 01.6 00.7	00.7
	1 01.8 59.6	4 59.6
	03.5 59.8	59.8
	58.7 01.5	5 01.5
	2 01.0 01.9	01.9
	59.7 00.3	00.3
	3 02.4 00.3	00.3
	4 02.2 59.6	4 59.6
	04.2 59.8	59.8
	5 04.6 03.0	5 03.0
	07.6 03.0	03.0
	6 00.1 01.9	01.9
	02.3 01.9	01.9
	59.2 02.2	02.2
	7 01.9 02.2	02.2
	58.1 01.4	01.4
	8 00.1 00.9	00.9
	58.3 02.1	02.1
	9 00.2 02.2	02.2
	58.0 03.7	03.7
	10 00.2 03.7	03.7
	58.2 01.5	01.5
	59.9 01.4	01.4
	11 57.7 01.2	01.2
	12 01.7 01.6	01.6
	58.1 02.8	02.8
	13 00.0 02.8	02.8

Declination

Date	Time	δ
26	h m 13 59.0	° ' 5 02.1
	14 00.7 02.1	02.1
	58.4 02.3	02.3
	15 00.3 02.3	02.3
	16 01.5 01.7	01.7
	03.1 01.7	01.7
	59.4 01.6	01.6
	17 02.0 01.5	01.5
	58.8 01.5	01.5
	18 00.4 01.5	01.5
	19 03.2 02.4	02.4
	04.8 02.4	02.4
	58.6 00.0	00.0
	20 00.8 59.9	4 59.9
	58.2 01.0	5 01.0
	59.8 01.1	01.1
	21 59.6 02.2	02.2
	22 02.0 02.2	02.2
	58.1 02.0	02.0
	23 00.3 01.8	01.8
	58.5 01.8	01.8
27	0 00.5 01.6	01.6
	59.6 01.7	01.7
	1 03.1 01.7	01.7
	59.4 02.3	02.3
	2 02.2 02.3	02.3
	59.3 01.9	01.9
	3 01.8 01.9	01.9
	4 00.0 01.9	01.9
	02.5 01.9	01.9
	59.9 02.6	02.6
	5 02.5 02.8	02.8
	57.7 03.0	03.0
	59.3 03.2	03.2
	6 59.1 02.6	02.6
	7 01.5 02.7	02.7
	58.5 02.2	02.2
	8 00.2 02.2	02.2
	9 00.5 01.6	01.6
	02.3 01.6	01.6
	10 02.7 00.5	00.5
	04.1 00.4	00.4
	58.3 00.3	00.3
	59.3 00.2	00.2

Horizontal Intensity

Date	Time	H
25	h m 11 26.6	° 32678
	31.3 78	78
	12 14.8 81	81
	17.5 81	81
	13 09.1 85	85
	13.5 84	84
	14 06.5 78	78
	09.8 76	76
	15 21.5 78	78
	27.0 76	76
	16 06.4 63	63
	09.6 62	62
	29.4 41	41
	32.0 41	41
	17 09.1 26	26
	13.2 26	26
	18 09.5 581	581
	12.4 74	74
	19 09.2 59	59
	12.6 51	51
	17.6 42	42
	20.9 35	35
26	20 25.2 33	33
	29.3 40	40
	21 06.7 21	21
	11.8 23	23
	22 08.2 30	30
	12.8 29	29
	23 07.7 51	51
	11.2 56	56
	0 08.4 69	69
	11.3 69	69
	1 13.1 641	641
	21.7 55	55
	2 07.4 24	24
	12.0 24	24
	3 11.6 17	17
	16.1 17	17
	4 12.8 19	19
	17.7 19	19
	5 14.8 17	17
	18.6 16	16
	6 10.2 22	22
	12.8 31	31
	7 09.2 27	27
	13.9 26	26
	8 11.3 37	37
	14.9 37	37
	9 05.3 25	25
	08.0 23	23
	10 07.9 38	38
	10.8 39	39
	11 05.5 60	60
	08.2 60	60

Horizontal Intensity

Dip

Date	Time		H
26	^h	^m	^r
	12	07.7	32657
		10.8	57
	13	05.9	40
		07.9	38
	14	09.2	39
		11.4	40
	15	10.8	44
		13.9	43
	16	08.8	38
		11.0	36
	17	06.7	38
		09.3	36
	18	05.3	32
		09.5	29
	19	10.9	32
		14.0	35
	20	05.6	54
		07.9	50
	21	04.8	49
		07.5	49
	22	09.4	24
		14.2	21
27	23	05.9	53
		09.0	58
	0	13.3	37
		16.9	36
	1	10.4	34
		14.5	35
	2	11.8	52
		16.4	51
	3	06.0	52
		08.4	54
	4	07.0	57
		11.6	55
	5	12.2	36
		14.6	32
	6	03.5	32
		05.4	32
	7	19.0	30
		22.1	33
	8	04.9	30
		07.2	30
	9	06.6	31
		09.0	29
	10	07.8	41
		09.6	41
	11	02.6	38
		04.3	38

Date	Time		θ	
25	^h	^m	[°]	[']
	11	50.2	45	59.9
		52.4	46	00.1
	17	26.8		10.6
		29.0		10.7
26	23	26.7		08.4
		30.4		08.5
	5	45.9		06.1
		48.0		06.1
	11	29.0		02.9
		32.4		02.8
	17	23.9		04.3
27		26.4		04.4
	23	18.8		03.0
		22.2		02.8
	5	17.6		06.0
		20.2		06.0

No. 117. Tomie (富江) 2

Lat.=32° 36' 34" N., Long.=128° 45' 53" E.

Height=25 m

Oct. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Date	Time	δ
27	h m 14 28.0	° ' 5 23.8
	30.0	23.8
	15 02.9	22.8
	04.4	22.8
	16 00.1	23.1
	01.9	23.1
	57.9	22.3
	59.8	22.3
	17 58.6	21.8
	18 00.1	21.8
	59.3	22.2
	19 01.1	22.2
	57.7	22.0
	59.8	22.0
	20 59.8	21.8
	21 01.8	21.9
	59.0	22.1
	22 01.0	22.1
	23 07.4	21.9
	10.1	21.9
	58.1	22.0
28	0 00.2	22.0
	59.3	22.2
	1 00.9	22.2
	58.1	22.8
	2 01.6	22.8
	58.3	22.2
	3 00.1	22.2
	57.5	22.7
	4 00.0	22.7
	58.4	23.0
	5 01.4	23.1
	58.0	23.6
	59.4	24.0
	6 58.1	23.7
	7 00.4	23.7
	58.0	22.8
	59.9	22.8
	8 59.5	22.3
	9 01.1	22.3
	58.9	22.1
	10 00.5	22.1
	59.8	22.0
	11 01.6	22.0
	59.3	22.8
	12 00.9	22.8
	58.0	23.3
	13 00.0	23.4
	58.8	23.8
	14 01.3	23.8
	59.6	23.8
	15 02.0	23.8
	16 01.4	23.4
	03.2	23.2

Declination

Date	Time	δ
28	h m 16 57.8	° ' 5 23.2
	59.4	23.1
	17 56.6	23.1
	58.5	23.1
	18 57.0	23.2
	59.2	23.1
	20 00.1	23.9
	02.5	24.0
	21 00.8	22.4
	02.0	22.4

Horizontal Intensity

Date	Time	H
27	h m 14 34.7	r 33109
	38.0	06
	15 10.2	28
	12.6	29
	16 10.3	099
	18.1	100
	17 07.1	092
	10.6	94
	18 09.6	99
	12.5	102
	19 07.8	098
	11.9	99
	20 05.9	101
	12.4	02
	21 07.7	12
	10.8	09
	22 06.5	07
	10.1	06
	23 18.6	07
	23.4	06
28	0 06.7	07
	09.9	08
	1 07.0	10
	10.5	10
	2 07.1	26
	10.2	25
	3 07.3	16
	12.0	19
	4 08.5	10
	11.9	10
	5 14.3	20
	18.6	20
	6 09.2	15
	17.2	15
	7 07.9	20
	11.0	18
	8 06.5	20
	11.0	20
	9 07.4	16
	11.7	15
	10 05.8	18
	08.7	17
	11 07.1	25
	09.7	24
	12 06.1	31
	08.4	31
	13 05.5	28
	08.7	28
	14 07.0	30
	09.3	31
	15 08.7	25
	11.2	25
	16 06.6	096
	09.1	98

Horizontal Intensity

Date	Time		H
28	^h	^m	^r
	17	05.1	33107
		07.9	06
	18	02.7	01
		04.1	02
	19	05.0	088
		07.9	86
	20	06.1	83
		08.7	83
	21	07.5	97
		13.2	91
		21.7	85
		25.0	81

Dip

Date	Time		θ	
27	^h	^m	^o	[']
	17	27.3	46	01.8
		30.1		01.6
28	23	43.2		01.1
		46.2		01.0
	5	22.1		01.4
		26.0		01.0
	11	29.8	45	59.5
		33.0		59.5

No. 118. Tomitaka (富 高)

Lat.=32° 24' 28" N., Long.=131° 37' 32" E.

Height=6 m

Oct. 1955

Inst. No. 21C Coil 21C Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time		δ	
	^h	^m	^o	[']
24	20	43.7	5	22.5
		46.7		22.6
	21	56.7		22.4
		59.7		22.4
25	22	59.4		22.3
	23	02.3		22.3
		58.2		22.3
	0	01.9		22.3
		57.2		22.2
	1	00.7		22.3
	2	00.3		22.2
		03.1		22.2
	3	03.3		22.2
		06.9		22.2
		59.3		22.2
	4	02.4		22.2
	5	00.2		22.6
		03.0		22.5
	6	34.2		23.3
		38.5		23.2
		59.5		23.1
	7	02.7		23.0
	8	20.0		22.1
		23.4		22.0
		58.5		21.4
	9	01.4		21.4
	10	03.3		22.3
		05.8		22.6
		57.1		24.3
		59.9		24.4
	11	55.0		25.3
		56.9		25.4
	12	57.8		25.8
	13	00.1		25.7
		56.8		25.6
		59.6		25.5
	14	55.1		24.4
		57.9		24.3

Date	Time		H
	^h	^m	^r
24	20	58.3	32514
	21	01.9	14
	22	06.2	13
		10.1	15
25	23	07.8	13
		10.9	13
	0	09.9	09
		13.9	10
	1	08.2	13
		12.4	13
	2	11.3	15
		15.1	15
	3	13.7	17
		18.0	18
	4	10.3	19
		19.3	21
	5	09.2	21
		14.3	19
	7	13.5	23
		17.2	24
	8	28.8	16
		33.7	21
	9	11.2	18
		16.2	17
	10	15.2	12
		19.0	13
	11	06.9	15
		10.9	15
	12	03.6	18
		09.3	19
	13	18.7	15
		22.3	18
	14	06.1	12
		09.6	12
	15	04.4	12
		07.5	14

Date	Time		θ
	^h	^m	^o [']
24	23	24.9	45 40.5
		29.0	40.6
25	7	35.0	40.0
		44.0	39.4
	11	22.9	39.6
		27.2	39.5
	17	21.0	42.1
		24.0	42.3

No. 119. Hitoyosi (人 吉)

Lat.=32° 12' 57" N., Long.=130° 45' 22" E.

Height=146 m

Nov. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Date	Time	δ
16	h m 10 00.9	° ' 5 24.5
	03.1	24.5
	58.0	25.6
	11 00.5	25.5
	12 06.9	26.3
	08.7	26.3
	59.1	26.6
	13 00.8	26.6
	59.1	26.4
	14 01.3	26.4
	59.8	26.2
	15 03.2	26.0
	59.8	26.1
	16 02.2	26.3
	58.2	26.5
	17 00.1	26.5
	18 01.7	25.8
	05.9	25.5
	11.5	25.3
	12.9	25.3
	19 00.1	25.9
	02.7	26.0
	58.7	27.0
	20 00.8	27.1
	58.6	26.1
	21 00.5	26.1
	57.9	25.9
	22 00.5	26.0
	23 01.4	25.4
	04.4	25.3
	58.6	24.8
17	0 00.5	24.7
	58.5	25.8
	1 00.6	25.7
	58.2	24.8
	2 00.4	24.8
	3 00.3	25.0
	02.8	25.0
	57.9	26.2
	59.2	26.3
	4 56.3	25.3
	59.0	25.3
	5 58.6	26.4
	6 01.3	26.5
	7 01.3	27.5
	03.1	27.7
	58.8	25.7
	8 01.0	25.5
	57.9	25.0
	59.7	24.9
	9 59.1	24.7
	10 01.3	24.7
	58.1	25.3
	11 00.8	25.1

Declination

Date	Time	δ
17	h m 11 58.6	° ' 5 26.5
	12 01.0	26.5
	57.4	27.3
	59.6	27.3
	13 58.1	28.0
	14 00.2	27.9
	58.3	27.4
	15 00.1	27.4
	59.4	26.3
	16 01.3	26.3
	17 00.6	26.0
	02.3	26.0
	58.8	26.3
	18 01.3	26.4

Horizontal Intensity

Date	Time	H
16	h m 10 16.8	γ 32555
	20.9	54
	11 06.5	44
	10.0	43
	12 15.2	40
	17.8	40
	13 10.8	36
	17.4	42
	20.8	44
	23.3	45
	14 10.7	37
	17.0	35
	15 13.8	30
	16.8	30
	16 08.8	21
	11.6	21
	17 05.4	09
	08.0	09
	18 17.2	26
	20.2	27
	19 14.7	26
	18.0	24
	20 07.6	13
	10.6	12
	21 06.9	12
	11.0	10
	22 08.8	499
	13.5	97
	17.0	98
	23 11.2	521
	15.1	19
17	0 07.8	30
	12.5	29
	1 07.5	39
	10.8	37
	2 12.7	43
	20.6	44
	3 08.8	33
	11.7	33
	4 05.3	51
	07.8	51
	5 07.8	49
	13.2	51
	6 09.7	50
	12.9	51
	7 10.2	55
	13.2	55
	8 08.1	56
	11.2	54
	9 05.2	56
	08.4	54
	10 14.4	55
	18.2	52
	11 06.8	52

Horizontal Intensity

Dip

Date	Time		H
	h	m	r
17	11	10.0	32552
	12	07.4	55
		10.8	55
	13	06.4	44
		09.2	44
	14	06.4	48
		09.4	48
	15	06.7	54
		09.6	54
	16	10.2	59
		12.6	57
	17	08.6	53
		11.6	53
	18	06.9	53
		09.8	52

Date	Time		θ	
	h	m	°	'
16	11	27.4	45	43.0
		31.8		42.9
	17	24.2		44.5
		27.8		44.2
	23	26.9		45.3
17		31.3		45.4
	5	22.9		44.1
		25.4		44.0
	11	30.2		43.6
		36.9		43.3

No. 120. Usibuka (牛 深)

Lat.=32° 11' 35" N., Long.=130° 01' 39" E.

Height=40 m

Nov. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Date	Time	δ
12	^h ^m	[°] [']
	15 59.1	5 14.7
	16 01.0	14.7
	58.5	14.0
	17 00.5	14.0
	18 24.5	12.8
	26.4	13.0
	19 02.5	14.2
	04.8	13.7
	20 07.3	12.6
	09.8	12.7
	59.6	12.2
	21 01.9	12.2
	59.6	12.2
	22 02.1	12.2
	58.5	11.9
	23 01.3	11.9
13	0 00.0	11.4
	02.1	11.3
	59.3	11.1
	1 01.3	11.0
	58.9	10.7
	2 00.8	10.7
	3 01.0	11.4
	04.3	11.4
	29.3	09.8
	30.7	09.7
	59.9	09.7
	4 01.6	09.8
	59.3	11.1
	5 03.1	11.1
	58.4	12.5
	6 01.2	12.5
	59.3	13.0
	7 01.6	13.0
	58.9	12.8
	8 01.5	12.8
	59.0	11.7
	9 00.9	11.7
	10 01.4	10.7
	02.9	10.6
	59.1	11.1
	11 00.8	11.2
	58.2	12.6
	59.9	12.6
	13 00.3	13.9
	01.9	13.9
	58.8	14.1
	14 00.3	14.4
	58.1	13.5
	15 00.2	13.5
	57.7	12.7
	59.6	12.7
	16 58.6	11.5
	17 00.7	11.3

Declination

Date	Time	δ
13	^h ^m	[°] [']
	18 43.2	5 11.8
	45.2	11.8

Horizontal Intensity

Date	Time	H
12	^h ^m	^r
	16 07.7	32774
	09.9	73
	17 11.7	45
	15.5	41
	20.6	43
	26.7	44
	18 32.5	19
	35.0	19
	19 12.0	24
	16.0	27
	20 17.4	42
	20.7	45
	21 09.5	44
	13.9	44
	22 13.0	40
	17.3	40
13	23 07.1	50
	10.2	50
	0 08.1	50
	11.0	50
	1 07.4	45
	11.4	42
	2 05.4	38
	09.4	36
	3 08.6	71
	11.3	71
	35.0	58
	37.4	54
	45.6	50
	47.5	48
	4 05.3	39
	07.9	39
	5 15.1	38
	18.9	38
	6 08.5	45
	11.5	44
	7 09.5	42
	13.6	42
	8 11.8	48
	15.5	48
	9 08.8	54
	12.8	54
	10 09.2	55
	12.7	53
	19.9	56
	11 06.0	56
	10.3	54
	12 03.9	59
	06.2	59
	13 05.9	56
	08.9	54
	14 05.7	39
	08.8	38
	15 04.6	39

Horizontal Intensity

Date	Time	H
13	^h 15	^r 32739
	^m 07.2	
	16	44
	05.4	44
	08.5	45
	17	45
	11.4	45
	13.8	45
	18	45
	52.7	46
	55.5	

Dip

Date	Time	θ
12	^h 17	[°] 45
	^m 52.3	['] 30.3
	56.8	30.3
13	23	31.0
	23.6	30.9
	28.2	31.1
	5	31.3
	32.4	31.9
	36.7	31.0
	11	31.0
	26.8	31.0
	29.3	31.2
	17	
	32.1	
	35.2	

No. 121. Miyazaki (宮 崎)

Lat.=31° 55' 05" N., Long.=131° 26' 16" E.

Height=5 m

Oct. 1955

Inst. No. 21C Coil 21C Mag. B Cell 2 Resist. 1

Declination			Horizontal Intensity			Dip		
Date	Time		δ	Date	Time		H	θ
27	h	m	° ' ''	27	h	m	r	° ' ''
	8	20.9	5 15.0		8	36.6	32698	
		24.0	15.1			39.9	99	
		59.7	14.6		9	09.2	705	
	9	02.1	14.6			14.2	02	
		53.8	14.3		10	11.9	10	
		59.2	14.1			17.9	08	
	10	56.8	14.2		11	04.7	10	
		58.7	14.2			08.6	09	
	11	57.2	15.2		12	06.0	05	
		59.7	15.2			09.0	04	
	12	56.8	15.9		13	04.9	12	
		58.9	15.9			08.1	03	
	14	01.3	16.7		14	10.5	13	
		04.1	16.6			14.8	15	
	15	00.0	16.8		15	09.0	696	
		02.3	16.7			12.0	97	
	16	02.4	16.7		16	33.5	98	
		05.2	16.7			36.7	99	
		57.5	16.1		17	06.2	95	
	17	00.0	16.1			08.9	95	
		56.0	15.1		18	02.7	705	
		58.4	15.1			05.5	04	
	19	03.4	15.3		19	10.6	699	
		05.9	15.3			13.7	98	
		59.8	15.0		20	10.6	705	
	20	03.3	15.1			14.2	08	
		59.3	15.0		21	08.9	06	
	21	02.3	15.0			13.3	08	
		57.1	15.0		22	06.5	05	
		59.7	15.1			10.2	05	
	23	00.6	14.5		23	08.7	08	
28		03.5	14.5	28		12.7	05	° ' ''
	0	42.6	15.0		0	56.2	15	
		45.5	15.0			59.8	11	
	1	06.6	14.4		1	12.5	11	
		08.7	14.5			21.0	08	
	2	00.2	15.9		2	08.9	20	
		02.8	15.8			12.3	21	
	3	01.6	14.6		3	12.0	16	
		05.5	14.5			15.3	16	
		56.9	15.0		4	12.5	17	
	4	00.4	15.0			17.0	19	
	5	00.4	15.6		5	12.2	18	
		05.1	15.8			15.2	16	
	6	04.2	16.1		6	12.7	18	
		07.7	16.2			15.3	18	
	7	02.6	16.1		7	11.6	22	
		06.2	16.1			14.8	20	
	8	01.5	15.4		8	10.6	19	
		05.1	15.3			13.1	20	
	9	04.5	14.6		9	13.8	15	
		07.0	14.6			16.1	14	

No. 122. Nakakosiki (中 甕)

Lat.=31° 49' 49" N., Long.=129° 52' 14" E.

Height=2 m

Nov. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Declination

Horizontal Intensity

Date	Time	δ
21	h m 10 09.7	° ' 4 49.1
	11.9	49.0
	59.9	48.6
	11 01.8	48.6
	59.5	49.6
	12 02.0	49.4
	58.3	50.0
	13 00.6	50.0
	59.5	50.5
	14 01.6	50.5
	58.5	50.1
	15 01.0	50.1
	59.3	49.4
	16 01.7	49.3
	59.7	48.3
	17 01.4	48.3
	58.9	47.9
	18 00.7	48.1
	59.1	48.4
	19 01.3	48.4
	59.3	48.7
	20 01.1	48.7
	59.4	47.7
	21 01.3	47.7
	59.7	47.7
	22 01.4	47.7
	59.5	47.8
	23 01.5	47.8
22	0 00.1	47.8
	02.2	47.8
	23.9	47.8
	26.2	47.8
	59.5	47.6
	1 02.3	47.5
	59.7	47.8
	2 01.8	48.0
	3 03.8	48.1
	05.9	48.2
	59.5	48.3
	4 01.5	48.3
	59.3	48.4
	5 01.6	48.4
	6 41.7	48.2
	43.5	48.2
	7 05.6	48.0
	07.8	48.0
	58.3	47.0
	8 00.6	47.0
	59.2	46.4
	9 02.3	46.4
	59.7	46.0
	10 02.3	46.0
	11 00.0	46.9
	02.2	47.0

Date	Time	δ
22	h m 11 59.0	° ' 4 48.4
	12 01.0	48.5
	59.4	49.3
	13 01.4	49.2
	59.0	49.6
	14 00.5	49.6
	15 02.9	48.9
	04.2	48.8

Date	Time	H
21	h m 10 20.0	r 32915
	23.3	15
	11 14.5	15
	17.8	14
	12 09.3	16
	12.3	16
	13 09.5	10
	19.8	09
	14 13.4	06
	15.9	07
	15 10.6	07
	14.2	09
	16 11.0	14
	14.7	15
	17 06.8	12
	11.9	16
	18 13.3	16
	18.6	18
	19 10.4	16
	15.2	19
	20 06.6	19
	10.1	20
	21 06.7	22
	09.2	22
	22 07.5	22
	11.0	23
	23 07.4	25
	10.6	25
22	0 07.3	27
	10.7	29
	1 10.9	28
	16.1	30
	20.9	30
	2 08.3	29
	12.2	29
	3 15.0	29
	18.5	29
	4 08.6	31
	12.9	30
	5 10.7	37
	15.5	37
	6 50.9	40
	53.7	41
	7 14.2	39
	16.8	38
	8 08.8	38
	13.0	37
	9 08.4	31
	11.2	30
	10 08.2	30
	10.8	30
	11 08.3	25
	11.7	25
	12 07.8	25

Horizontal Intensity

Date	Time		H
22	^h	^m	^r
	12	11.2	32925
	13	07.4	31
		11.7	30
	14	12.7	32
		16.3	33
	15	10.0	42
		14.5	42

Dip

Date	Time		θ	
21	^h	^m	[°]	[']
	11	30.0	45	12.6
		34.4		12.7
	17	33.5		12.9
		36.1		12.9
22	23	24.1		13.5
		28.9		13.4
	5	30.2		13.3
		47.8		13.4
	11	29.2		12.8
		32.3		12.7

No. 123. Kagosima (鹿児島)

Lat.=31° 36' 32" N., Long.=130° 32' 30" E.

Height=15 m

Nov. 1955

Inst. No. 21C Coil 21C Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	^h ^m	[°] [']
1	21 02.0	45.5
	05.0	45.4
	22 10.3	45.3
23	12.7	45.5
	07.2	45.7
	10.6	45.8
2	0 05.4	45.6
	08.0	45.4
	1 21.1	45.6
	23.2	45.6
	2 01.2	45.6
	03.8	45.6
	57.9	45.8
	3 00.3	45.7
	57.6	45.9
	4 00.7	46.0
	57.7	45.7
	5 01.7	45.6
	58.0	46.0
	6 02.6	46.1
	58.5	45.9
	7 01.3	45.9
	58.1	44.9
	8 01.2	44.7
	56.2	43.2
	59.0	43.2
	9 55.9	42.9
	57.6	42.9
	10 56.6	43.6
	11 00.5	43.7
	12 01.2	46.5
	03.8	46.6
	13 00.4	48.1
	04.8	48.3
	58.5	48.2
	14 01.2	48.2
	57.9	47.2
	15 00.7	47.1
	16 01.0	46.7
	03.3	46.7
	17 00.0	46.5
	02.4	46.5
	57.0	46.0
	18 00.8	45.9
	19 05.5	45.8
	08.6	45.7
	59.1	45.5
	20 03.0	45.4
	21 01.6	45.4
	05.1	45.4

Date	Time	H
	^h ^m	^r
1	21 10.8	32882
	14.8	82
	22 21.3	78
23	25.6	84
	17.9	89
	23.0	87
2	0 22.2	89
	32.1	85
	1 24.3	88
	37.4	90
	2 09.5	91
	17.4	95
	3 05.8	99
	09.1	99
	4 07.6	95
	11.9	96
	5 09.3	95
	14.0	92
	6 10.2	89
	13.9	87
	7 07.0	94
	11.1	97
	8 09.6	92
	14.5	92
	9 04.0	88
	07.1	90
	10 05.0	84
	09.5	85
	11 06.5	88
	10.3	90
	12 23.2	906
	26.4	03
	13 11.2	897
	14.3	900
	14 05.9	897
	11.7	97
	15 05.3	901
	07.8	00
	16 08.5	894
	11.2	94
	17 09.9	99
	13.1	98
	18 07.7	97
	11.6	97
	19 17.8	99
	23.3	97
	20 09.9	98
	14.0	98
	21 10.8	99
	15.2	98

Date	Time	θ
	^h ^m	[°] [']
2	1 01.2	44 33.0
	05.6	32.4
	5 32.5	32.8
	36.8	32.6
	11 23.6	31.2
	26.7	31.3
	17 22.7	33.1
	26.3	33.0

No. 124. Sibusi (志布志)

Lat.=31° 28' 29" N., Long.=131° 06' 02" E.

Height=55 m

Oct. 1955

Inst. No. 21C Coil 21C Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
30	h m 8 41.8	° ' 4 59.1
	47.4	59.1
	9 19.8	59.3
	22.5	59.4
	57.9	59.6
	10 00.6	59.8
	58.4	5 00.8
	11 01.1	00.8
	12 03.9	02.1
	06.8	02.2
	57.7	03.5
	13 00.3	03.8
	59.0	02.8
	14 01.3	02.7
	55.1	02.1
	57.9	02.0
	15 57.5	01.2
	59.8	01.2
	16 56.8	00.7
	59.2	00.6
	17 56.1	00.7
	58.8	00.7
	19 16.0	00.6
31	18.9	00.6
	56.7	00.7
	59.0	00.8
	20 57.8	4 59.9
	21 00.0	5 00.0
	57.5	00.6
	22 00.5	00.6
	23 01.6	00.5
	05.3	00.5
	58.2	00.5
	0 01.3	00.5
	57.6	00.4
	1 01.3	00.2
	58.1	00.4
	2 01.7	00.3
	3 04.3	00.4
	07.2	00.5
	57.8	4 59.6
	4 01.1	59.9
	5 01.6	59.5
	04.5	59.7
	6 02.6	5 00.1
	05.8	00.1
	58.3	00.0
	7 01.6	4 59.9
	58.2	58.2
	8 01.6	58.0
	54.7	58.1
	58.0	58.1
	9 55.6	58.5
	59.0	58.5
	10 58.4	5 00.5
	11 01.0	00.5

Date	Time	H
30	h m 12 15.8	r 32942
	21.9	41
	13 08.1	50
	12.9	50
	14 08.0	40
	11.9	40
	15 10.0	38
	13.1	37
	16 05.7	34
	08.9	34
	17 06.1	28
	08.7	28
	18 04.3	28
	07.5	28
	19 29.3	27
	40.7	26
	20 06.1	27
	10.7	26
	21 05.2	31
	08.7	31
	22 05.4	29
	08.5	29
	23 11.5	30
31	14.7	30
	0 07.3	36
	10.8	35
	1 10.8	31
	14.0	31
	2 09.5	37
	14.3	41
	3 35.3	36
	38.8	36
	4 10.5	28
	14.4	28
	5 21.6	24
	26.2	22
	6 15.7	22
	24.1	26
	7 10.2	19
	14.0	22
	8 07.2	17
	43.5	15
	46.8	13
	9 05.0	10
	08.7	11
	10 07.7	10
	13.0	11
	11 06.6	19
	11.6	22

Date	Time	θ
30	h m 11 48.7	° ' 44 24.2
	52.0	24.3
	17 18.6	24.7
	21.5	24.5
	23 24.2	26.1
31	28.1	25.8
	5 39.3	25.5
	44.5	25.5

No. 125. Makurazaki (枕崎)

Lat.=31° 15' 57" N., Long.=130° 17' 26" E.

Height=2 m

Nov. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	^h ^m	[°] [']
24	11 00.3	4 38.8
	01.9	38.8
	59.9	39.9
	12 01.8	39.9
	58.1	41.1
	59.8	41.2
	13 58.7	42.0
	14 00.5	42.1
	58.6	42.0
	15 00.1	42.0
	57.7	41.7
	59.8	41.5
	16 58.5	41.2
	17 00.5	41.3
	18 08.6	40.9
	10.6	40.9
	19 00.0	40.5
	02.6	40.5
	20 02.7	41.0
	05.3	41.0
	59.8	40.1
	21 01.7	39.9
	59.6	40.9
	22 01.6	40.9
	59.2	40.6
	23 01.4	40.6
	58.9	40.7
25	0 00.9	40.7
	59.3	40.3
	1 01.3	40.3
	2 00.8	40.7
	02.2	40.7
	59.7	40.7
	3 01.6	40.7
	58.9	40.8
	4 01.3	40.8
	58.7	40.3
	5 00.4	40.3
	59.7	40.7
	6 01.5	40.7
	57.8	40.9
	7 00.0	41.0
	58.2	40.1
	59.9	40.1
	8 58.3	40.4
	9 00.5	40.4
	59.1	39.8
	10 00.8	39.7
	11 00.5	39.5
	02.4	39.5
	59.0	39.6
	12 01.4	39.6
	58.9	40.3
	13 00.6	40.3

Date	Time	H
	^h ^m	^r
24	11 12.8	32958
	15.9	58
	12 09.5	56
	13.3	56
	13 05.0	44
	08.4	44
	14 06.1	41
	09.8	42
	15 04.8	50
	08.7	50
	16 09.0	40
	14.2	40
	17 06.7	34
	10.9	34
	18 16.6	37
	21.7	38
	19 16.0	44
	20.9	44
	20 22.7	39
	28.6	39
	21 09.7	37
	13.6	37
	22 07.1	36
	09.9	36
	23 07.6	31
	10.7	32
25	0 06.4	30
	09.0	31
	1 06.7	28
	10.6	29
	2 08.0	29
	11.9	30
	3 07.3	33
	11.0	34
	4 12.7	41
	19.8	41
	5 07.5	44
	16.6	44
	6 07.5	44
	11.6	44
	7 08.3	50
	13.4	53
	8 06.6	59
	08.9	59
	9 06.4	54
	09.7	55
	10 07.5	48
	10.5	48
	11 07.9	48
	10.8	48
	12 09.6	45
	13.2	45
	13 06.4	45
	09.2	44

Date	Time	θ
	^h ^m	[°] [']
24	11 28.1	44 26.4
	33.2	26.4
	17 36.3	27.6
	41.4	27.6
	23 22.0	27.8
25	28.4	28.1
	5 23.2	27.3
	26.8	27.4
	11 26.8	27.3
	29.2	27.3

No. 126. Nisino-omote (西之表)

Lat.=30° 44' 08" N., Long.=131° 00' 09" E.

Height=20 m

Nov. 1955

Inst. No. 21C Coil 21C Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	^h ^m	[°] [']
3	21 42.3	43.7
	45.6	43.7
	56.1	43.8
	59.1	43.8
	22 57.2	43.7
4	23 00.3	43.7
	59.3	43.7
	0 01.4	43.7
	58.4	43.7
	1 00.9	43.7
	2 15.6	43.7
	18.6	43.6
	57.4	43.5
	3 00.1	43.4
	47.2	43.4
	51.9	43.2
	5 34.8	43.6
	37.7	43.8
	7 15.9	42.7
	20.0	42.8
	8 03.5	41.8
	06.8	41.9
	57.5	42.3
	59.8	42.2
	10 02.6	42.2
	05.4	42.2
	11 00.5	44.0
	03.4	44.1
	12 09.3	45.9
	11.3	46.0
	58.1	47.2
	13 00.3	47.3
	57.3	47.8
	59.9	47.8
	14 58.0	46.7
	15 01.3	46.8
	59.7	46.5
	16 02.7	46.4
	57.5	44.8
	17 01.0	44.7
	57.8	45.1
	18 00.1	45.1
	19 14.2	44.1
	16.3	44.1
	55.6	44.1
	57.9	44.1
	20 57.0	43.7
	59.1	43.7
	21 54.5	43.9
	56.5	43.9

Date	Time	H
	^h ^m	^r
3	22 08.1	33182
	11.5	80
4	23 07.3	88
	11.6	89
	0 08.1	84
	12.2	84
	1 07.3	84
	10.8	85
	2 24.3	85
	27.4	87
	3 05.4	79
	08.9	83
	4 01.3	86
	08.8	83
	5 57.3	85
	6 02.2	87
	7 30.0	92
	33.8	91
	8 27.3	68
	30.3	70
	9 05.0	65
	08.4	67
	10 11.7	50
	16.6	45
	11 09.9	50
	14.5	50
12	12 18.2	54
	20.8	53
	13 05.8	55
	09.8	54
	14 04.6	38
	09.3	44
	15 08.1	25
	14.3	23
	16 09.0	45
	12.2	47
	17 08.0	59
	11.0	60
	18 06.4	62
	09.7	64
	19 22.5	60
	26.6	58
20	20 13.4	48
	16.6	54
	21 03.9	54
	07.7	54
22	01.6	59
	04.7	59

Date	Time	θ
	^h ^m	[°] [']
3	23 26.9	43 25.1
	30.5	25.4
4	6 18.4	26.2
	23.5	26.0
	11 55.5	23.7
	58.0	24.4
	17 22.4	26.0
	25.6	26.0

No. 127. Miyanoura (宮之浦)

Lat.=30° 24' 58" N., Long.=130° 34' 45" E.

Height=40 m

Nov. 1955

Inst. No. 21C Coil 21C Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
8	h m 17 07.6	° ' 4 40.2
	11.4	40.1
	58.1	40.7
	18 01.3	40.7
	19 11.8	40.5
	14.7	40.5
	58.6	40.4
	20 02.6	40.4
	56.5	40.5
	21 00.0	40.4
	57.7	40.3
	22 01.6	40.3
	57.6	40.3
	23 00.2	40.3
	59.8	39.9
	9 0 02.6	39.8
		57.7
		38.4
9	59.9	38.2
	2 11.7	38.8
	13.6	38.8
	53.5	40.1
	56.0	40.0
	4 43.3	40.3
	47.5	40.3
	5 04.1	40.4
	06.5	40.4
	55.0	40.5
	57.3	40.5
	6 54.6	40.0
	57.4	39.9
	7 58.8	39.8
	8 01.2	39.9
	55.3	40.9
	58.5	40.9
	10 07.3	39.9
	09.5	39.9
	55.8	40.2
	57.8	40.2
	11 58.8	41.2
	12 01.1	41.2
	59.1	41.5
	13 02.1	41.8
	57.6	42.9
	14 00.6	42.9
	15 01.5	43.1
	17 16.2	* 41.4
	18.8	* 41.3

Date	Time	H
8	h m 17 19.1	γ 33365
	23.2	63
	18 07.1	56
	11.4	59
	19 21.6	60
	25.7	60
	20 17.6	67
	21.2	67
	21 05.7	73
	08.7	72
	22 11.4	74
	14.5	73
	23 05.4	65
	09.7	65
	9 0 08.4	79
	11.4	83
	1 05.7	84
	08.6	82
9	2 20.7	93
	24.9	92
	4 54.4	82
	58.8	79
	5 12.8	85
	17.1	86
	6 02.7	80
	06.1	82
	7 04.5	82
	08.4	80
	8 06.7	73
	10.6	72
	9 05.0	68
	09.9	68
	10 14.6	65
	17.6	67
	11 02.8	67
	05.5	66
	12 07.7	75
	18.8	74
	13 07.8	86
	10.6	86
	14 08.9	70
	13.5	70
	15 22.5	66
	24.8	71
	16 03.7	72
	08.1	72
	17 25.9	72
	29.9	72

Date	Time	θ
8	h m 23 22.0	° ' 42 58.8
	25.4	59.0
	9 5 32.1	58.2
9	37.0	58.2
	11 16.8	58.5
	21.1	58.1
	17 45.4	58.3
	48.3	59.3

* Mag. C

No. 128. Minamitane (南種子)

Lat.=30° 24' 36" N., Long.=130° 54' 13" E.

Height=150 m

Nov. 1955

Inst. No. 21C Coil 21C Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
6	8 26.5	4 34.2
	30.8	34.2
	54.2	33.6
	57.0	33.5
	9 56.4	32.8
	58.5	32.8
	11 00.4	33.0
	04.2	33.0
	12 11.2	35.0
	13.8	35.0
	58.8	36.3
	13 01.6	36.3
	56.4	37.0
	58.9	37.0
	14 55.7	36.9
	58.1	36.9
	15 56.6	36.5
	59.1	36.4
	16 56.4	36.1
	58.7	36.1
	17 54.4	36.1
	56.9	36.0
	19 10.5	35.5
	13.2	35.5
	58.7	35.5
	20 01.3	35.5
	55.7	35.6
	21 00.7	35.8
	55.5	35.8
	58.7	35.9
	22 54.1	35.8
	56.2	35.8
	23 56.0	35.7
	59.2	35.6
7	0 59.4	35.7
	1 01.4	35.6
	58.0	35.4
	2 01.3	35.2
	56.9	35.3
	3 00.1	35.2
	56.7	35.2
	59.6	35.2
	4 56.4	35.7
	59.5	35.8
	5 57.7	35.7
	6 01.2	35.8
	57.1	36.1
	59.8	36.1
	7 57.3	35.2
	8 00.6	35.1
	57.5	34.5
	9 01.1	34.4

Date	Time	H
	h m	r
6	8 44.2	33218
	47.9	18
	9 02.5	17
	06.8	15
	10 05.9	12
	10.3	13
	11 11.5	09
	17.1	10
	12 20.0	15
	23.8	15
	13 08.6	22
	11.7	20
	14 09.9	22
	12.7	22
	15 03.7	25
	06.9	24
	16 04.8	26
	07.5	26
	17 05.2	28
	08.8	28
	18 03.3	27
	06.3	25
	19 18.2	25
	21.7	28
	20 08.2	27
	11.2	28
	21 07.2	29
	11.0	28
	22 08.4	30
	12.3	29
	23 02.3	33
	05.2	32
7	0 05.4	36
	08.8	33
	1 06.3	36
	09.0	35
	2 13.3	40
	17.0	34
	3 06.2	35
	09.8	35
	4 08.4	37
	13.0	35
	5 05.3	35
	08.1	36
	6 08.9	44
	12.3	43
	7 06.5	44
	09.8	44
	8 06.1	41
	09.1	41
	9 07.5	37
	11.6	36

Date	Time	θ
	h m	° '
6	11 32.4	43 3.9
	36.8	3.3
	17 19.0	3.7
	23.0	3.8
	23 15.5	3.5
7	19.3	3.3
	5 19.8	4.0
	24.5	3.4

No. 129. Anbō (安 房)

Lat.=30° 18' 27" N., Long.=130° 39' 15" E.

Height=50 m

Nov. 1955

Inst. No. 21C Coil 21C Mag. A Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
11	h m 9 19.9	° ′ * 4 36.0
	24.3	36.1
	10 06.4	36.1
	09.6	36.0
	56.7	36.4
	11 00.1	** 36.4
	48.4	37.3
	50.8	37.3
	12 55.2	38.6
	57.1	38.6
	14 04.8	40.1
	06.8	40.0
	54.3	39.8
	57.1	39.9
	16 00.9	38.9
	02.9	39.0
	54.4	37.7
	56.9	37.7
	17 54.9	37.6
	57.1	37.6
	19 54.5	37.6
	57.0	37.6
	20 57.9	37.6
	21 00.2	37.7
	22 02.9	37.6
	05.7	37.7
	56.5	37.5
	58.5	37.6
	12 0 01.4	37.2
	03.7	37.2
	1 06.2	37.2
	08.9	37.2
	59.9	37.2
	2 02.0	37.1
	57.1	37.2
	3 00.0	37.2
	57.0	36.9
	59.4	36.9
	4 59.4	37.3
	5 01.8	37.3
	57.6	37.7
	6 00.7	37.7
	7 00.4	37.7
	02.9	37.6
	57.3	36.3
	59.1	36.2
	8 55.4	34.9
	57.3	34.9
	10 16.4	34.6
	19.0	34.7
	50.6	35.0
	52.8	35.0
	12 08.6	36.9
	10.9	36.9
	13 05.1	38.4
	06.8	38.3
	52.7	39.0
	55.3	38.9

Date	Time	H
11	h m 9 35.0	r 33384
	37.9	83
	10 17.5	84
	21.4	84
	11 06.3	77
	09.1	79
	12 14.2	83
	17.5	81
	13 02.8	82
	05.9	81
	14 13.8	78
	16.8	77
	15 03.3	79
	06.6	80
	16 21.0	77
	23.9	76
	17 02.2	76
	05.0	76
	18 06.6	80
	09.1	79
	20 02.9	74
	05.8	75
	21 09.4	77
	13.1	74
	22 12.4	77
	16.3	76
	23 03.7	76
	06.9	75
	12 0 09.9	70
	14.8	69
	1 15.0	80
	19.7	84
	2 07.6	† 82
	12.0	† 82
	3 06.9	78
	10.8	80
	4 06.6	80
	10.5	81
	5 07.6	82
	11.0	80
	6 06.6	83
	09.6	85
	7 08.2	90
	12.1	92
	8 04.0	90
	06.9	90
	9 02.2	80
	04.5	80
	10 25.6	79
	29.3	78
	11 14.8	86
	17.5	84
	12 17.5	90
	21.1	90
	13 26.6	87
	29.8	90
	14 18.5	92
	22.5	90

Date	Time	θ
11	h m 11 19.4	° ′ 42 47.0
	21.4	46.8
	17 16.3	47.7
	20.3	47.7
	23 17.8	47.2
12	20.2	47.2
	5 23.4	47.0
	26.8	47.5

*~** Mag. C

† Cell 3

No. 130. Nase (名 瀬) 1

Lat.=28° 22' 33" N., Long.=129° 29' 52" E.

Height=10 m

Dec. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	h m	° '
4	17 22.9	3 50.8
	24.4	50.8
	18 02.2	50.8
	03.7	50.7
	19 01.5	50.4
	04.4	50.4
	20 58.6	50.2
	21 00.7	50.2
	59.6	50.2
	22 01.6	50.3
5	58.8	50.2
	23 01.8	50.4
	0 11.2	50.3
	12.8	50.3
	1 01.2	50.1
	02.6	50.2
	2 00.4	50.2
	01.2	50.2
	59.8	49.9
	3 01.5	49.9
	59.1	50.3
	4 01.8	50.8
	59.4	50.3
	5 02.4	50.3
	59.8	50.2
	6 01.4	50.3
	59.4	50.5
	7 01.5	50.5
	59.2	50.2
	8 01.4	50.2
	59.7	49.4
	9 02.6	49.4
	10 01.1	48.9
	02.1	48.8
	11 00.9	48.9
	02.9	49.1
	59.5	49.5
	12 01.0	49.5
	59.2	49.7
	13 00.2	49.7
	14 00.9	50.6
	02.8	50.5
	15 01.6	51.3
	02.8	51.4
	59.5	50.7
	16 01.5	50.5
	59.5	49.6
	17 01.7	49.6
	59.2	49.8
	18 01.0	49.8
	58.7	49.5
	19 00.1	49.5

Date	Time	H
	h m	r
4	17 31.6	34078
	35.3	77
	18 08.6	76
	11.1	75
	19 14.0	77
	17.6	76
	21 06.7	76
	10.9	77
	22 08.7	75
	12.8	76
5	23 06.9	75
	10.5	75
	0 18.3	82
	21.1	82
	1 09.1	77
	11.5	78
	2 05.6	78
	07.8	78
	3 08.9	82
	11.0	82
	4 04.9	82
	07.1	82
	5 08.7	84
	10.7	83
	6 07.7	86
	10.5	86
	7 06.8	95
	09.5	95
	8 06.9	100
	10.3	099
	9 07.7	100
	11.0	00
	10 08.2	00
	11.2	099
	11 08.3	108
	11.2	08
	12 05.9	13
	08.4	11
	13 06.2	08
	09.1	08
	14 07.8	03
	10.7	00
	15 06.8	05
	10.7	04
16	08.0	02

Date	Time	θ
	h m	° '
4	17 44.6	39 35.4
	47.5	35.7
	52.0	35.5
5	23 57.6	36.4
	0 02.5	36.4
	5 17.2	36.5
	20.9	36.5
	11 39.0	32.7
	40.9	32.7
	17 26.3	35.0
	29.2	35.2

No. 131. Nase (名 瀬) 2

Lat.=28° 21' 40" N., Long.=129° 30' 12" E.

Height=10 m

Dec. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Declination

Horizontal Intensity

Date	Time	δ
1	^h ^m	[°] [']
	11 58.3	3 53.6
	12 00.5	53.6
	59.0	54.2
	13 00.6	54.1
	59.4	55.1
	14 01.7	55.1
	59.4	54.8
	15 01.1	54.8
	58.7	54.3
	16 00.5	54.4
	17 02.5	53.9
	04.8	53.9
	06.9	53.9
	57.8	53.7
	59.9	53.7
	18 59.1	54.4
	19 01.1	54.3
	58.7	54.2
	20 00.5	54.3
	21 11.9	54.1
	13.8	54.1
	22 03.4	54.4
	08.6	54.4
	59.6	52.2
	23 02.4	52.5
	58.8	54.2
	2 0 01.0	54.2
	58.2	53.9
	1 00.0	53.9
	59.4	53.2
	2 01.4	53.3
	58.7	53.9
	3 00.4	53.8
	58.2	53.1
	4 00.6	53.1
	58.9	55.0
	5 00.2	55.1
	59.0	55.6
	6 02.2	55.7
	58.8	56.9
	7 01.4	56.8
	58.0	56.5
	59.8	56.3
	8 59.1	56.5
	9 04.9	56.4
	58.0	55.6
	59.8	55.6
	10 57.8	55.7
	59.8	55.8
	11 58.1	56.4
	12 00.0	56.5
	58.2	56.2
	13 00.4	56.2
	57.3	55.9

Date	Time	δ
2	^h ^m	[°] [']
	13 59.7	3 56.1
	14 57.1	55.3
	58.5	55.2
	15 57.2	55.5
	59.0	55.8
	16 56.8	56.1
	58.4	56.0
	17 57.8	56.3
	59.8	56.2
	18 57.1	54.3
	59.3	54.1
	19 58.6	53.5
	20 00.3	53.3
	58.4	53.5
	21 00.7	53.7
	57.7	53.5
	22 02.6	53.5
	57.9	53.7
	23 00.5	53.5
	59.4	53.8
	3 0 01.5	53.7
	1 01.1	53.6
	03.1	53.6
	2 00.5	53.8
3	02.9	53.8
	59.5	53.7
	3 01.4	53.6
	59.0	53.9
	4 01.1	53.8
	58.8	53.8
	5 00.9	53.8
	6 32.1	53.5
	33.7	53.6
	59.3	53.7
	7 01.1	53.8
	57.7	54.1
	59.8	54.3
	8 58.0	53.7
	9 00.0	53.7
	58.7	53.2
	10 00.9	53.2
	58.2	53.1
	11 00.0	53.1
	58.5	53.2
	59.9	53.3
	12 58.9	53.5
	13 00.7	52.4

Date	Time	H
1	^h ^m	[°] [']
	12 13.9	34281
	17.5	81
	13 08.7	82
	16.1	81
	14 08.8	78
	12.7	77
	15 07.8	80
	11.2	81
	16 06.6	76
	09.4	77
	17 12.1	81
	14.6	82
	18 05.9	78
	08.5	77
	19 06.2	63
	09.0	63
	20 05.1	60
	07.8	60
	21 19.9	60
	23.6	61
	22 16.7	52
	21.0	52
	23 11.4	55
	20.2	48
	2 0 07.0	58
	10.5	56
	1 08.9	74
	12.4	73
	2 07.8	38
	13.1	37
	3 07.4	39
	10.4	39
	4 08.4	23
	11.6	23
	5 09.1	15
	11.4	17
	6 13.8	19
	16.4	19
	7 07.5	29
	10.8	26
	8 04.6	35
	07.4	35
	9 10.9	39
	13.9	37
	10 05.0	30
	07.0	30
	11 05.5	22
	08.6	22
	12 06.1	20
	08.5	21
	13 06.4	11
	09.3	11
	14 05.7	04
	08.7	04

Horizontal Intensity

Date	Time	H
2	^h ^m	^r
	15 05.3	34199
	08.6	98
	16 04.8	95
	09.0	201
	17 05.4	179
	07.8	78
	18 07.1	80
	09.4	80
	19 09.3	84
	13.1	83
	20 08.5	98
	11.1	99
	21 07.2	211
	10.7	12
	22 09.9	15
	13.1	15
	23 12.5	28
	16.3	29
	3 0 07.8	31
	11.1	31
	1 09.9	37
	13.1	38
	2 09.8	41
	13.4	41
3	3 07.3	43
	10.4	42
	4 07.6	44
	10.5	44
	5 09.6	54
	13.0	54
	6 39.9	53
	43.0	55
	7 07.2	58
	09.9	58
	8 10.8	61
	13.0	63
	9 06.5	66
	09.2	67
	10 06.1	67
	08.7	65
	11 06.8	63
	09.9	63
	12 05.4	69
	08.4	69
	13 04.3	66
	06.8	66

Dip

Date	Time	θ
1	^h ^m	[°] [']
	17 27.8	39 59.0
	31.4	59.0
2	23 35.6	40 1.0
	39.7	0.7
	5 21.4	3.3
	25.7	3.5
	11 21.5	1.6
3	23.7	1.6
	17 23.6	5.6
	31.7	5.2
	23 30.5	2.6
	34.9	2.6
	5 20.0	2.3
	23.1	2.2
	11 22.1	39 59.3
	24.6	59.2

No. 132. Naon (名 音)

Lat.=28° 19' 52" N., Long.=129° 19' 03" E.

Height=3 m

Dec. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ	Date	Time	H	Date	Time	θ
6	^h 19 ^m 06.0	[°] 3 ['] 57.1	6	^h 19 ^m 20.2	34292	6	^h 23 ^m 25.4	[°] 39 ['] 51.4
	08.2	57.0		25.5	91		30.1	51.4
	20 04.0	56.5		20 13.1	95	7	5 34.3	51.0
	05.4	56.4		18.4	95		37.4	51.3
	59.2	56.3		21 08.5	94		11 35.4	50.5
	21 01.3	56.3		10.8	95		38.1	50.4
	59.5	55.8		22 13.9	92		17 25.0	52.1
	22 01.8	55.8		18.9	92		27.9	52.3
	58.3	56.1		23 11.1	97			
	23 01.3	56.2		14.7	97			
7	0 00.2	56.1	7	0 10.8	300			
	03.2	56.1		14.4	00			
	58.4	56.0		1 10.1	00			
	1 00.3	56.0		16.7	02			
	59.1	56.1		2 07.8	01			
	2 01.5	56.1		11.1	01			
	58.6	56.1		3 05.4	02			
	3 00.9	56.2		09.0	03			
	59.3	56.5		4 08.6	05			
	4 01.4	56.5		11.6	04			
	59.4	56.5		5 15.6	01			
	5 01.5	56.4		18.0	01			
	6 00.4	56.6		6 10.0	05			
	02.2	56.6		16.2	05			
	58.6	55.7		7 08.0	05			
	7 00.8	55.8		11.3	06			
	58.9	56.8		8 08.7	06			
	8 01.2	56.8		11.7	05			
	59.9	56.8		9 07.5	02			
	9 01.9	56.8		19.7	03			
	59.1	55.9		10 09.7	02			
	10 01.0	55.8		12.4	01			
	59.2	56.3		11 07.1	04			
	11 01.2	56.4		10.0	04			
	12 05.5	56.1		12 14.2	290			
	07.6	56.0		17.0	90			
	13 01.1	57.2		13 09.3	80			
	03.1	57.2		12.4	80			
	58.5	57.3		14 05.9	85			
	14 00.3	57.3		08.2	86			
	59.2	57.6		15 07.3	84			
	15 02.1	57.6		10.2	84			
	58.3	57.3		16 06.8	88			
	16 00.6	57.3		10.3	89			
	17 00.7	56.3		17 07.8	96			
	02.2	56.1		10.5	95			
	59.2	56.2		18 09.8	93			
	18 01.4	56.2		12.0	95			
	58.3	56.2		19 07.5	95			
	19 00.3	56.3		10.9	95			
	58.0	55.9		20 05.6	98			
	59.5	55.7		09.6	97			

No. 133. Koniya (古仁屋)

Lat.=28° 08' 45" N., Long.=129° 19' 02" E.

Height=20 m

Dec. 1955

Inst. No. 21 Coil 21A Mag. B Cell 2 Resist. 1

Declination

Horizontal Intensity

Dip

Date	Time	δ
	^h ^m	[°] [']
10	8 23.3	3 53.3
	26.6	53.3
	58.3	52.7
	9 00.1	52.7
	58.6	52.3
	10 00.8	52.2
	58.7	51.6
	11 00.9	51.6
	58.9	51.9
	12 00.5	51.9
	58.5	53.0
	13 00.8	52.9
	58.2	53.3
	14 00.0	53.3
	57.8	53.3
	59.2	53.3
	15 58.1	53.5
	59.8	53.5
	16 57.6	53.2
	59.2	53.2
	17 58.4	53.0
	18 00.9	53.0
	19 02.6	52.8
	04.3	52.8
	59.2	53.1
	20 01.0	53.1
	21 00.0	53.0
	01.8	53.1
	22 00.0	52.3
	01.6	52.4
	59.5	52.8
	23 02.2	52.8
	58.4	52.8
11	0 00.1	52.8
	1 00.0	52.4
	02.3	52.4
	2 00.8	52.0
	02.2	52.0
	3 00.1	52.6
	01.6	52.6
	4 01.7	52.6
	03.8	52.6
	5 01.8	52.8
	03.8	52.8
	6 02.5	53.2
	04.7	53.2
	58.3	53.2
	7 02.3	53.2
	58.9	53.5
	8 00.9	53.5
	58.7	52.5
	9 01.0	52.5
	10 01.8	52.0
	03.3	52.0
	57.7	52.6
	59.6	52.6

Date	Time	H
	^h ^m	^r
10	8 58.9	34387
	42.4	88
	9 11.6	87
	20.4	86
	10 07.5	91
	10.1	91
	11 08.7	88
	11.0	88
	12 10.1	87
	13.6	87
	13 08.5	84
	12.6	84
	14 05.4	78
	09.9	78
	15 05.0	75
	07.8	75
	16 05.7	79
	08.8	80
	17 05.3	78
	08.4	76
	18 07.1	76
	09.6	76
	19 10.2	73
	13.3	74
	20 08.0	72
	10.6	72
	21 07.1	71
	09.9	71
	22 06.3	76
	09.1	76
	23 08.6	68
	11.6	71
11	0 07.0	81
	10.4	81
	1 13.1	76
	17.8	75
	2 13.4	72
	16.9	72
	3 08.0	74
	13.6	73
	4 09.5	67
	12.8	67
	5 10.3	72
	13.2	72
	6 10.3	74
	13.6	74
	7 08.1	78
	11.6	79
	8 06.2	86
	09.0	86
	9 06.1	94
	08.6	94
	10 10.4	95
	16.9	96
	11 05.4	88
	12.7	88

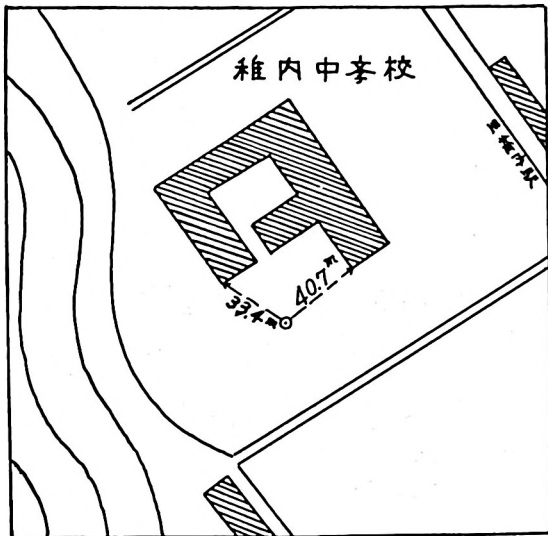
Date	Time	θ
	^h ^m	[°] [']
10	11 29.1	39 43.7
	32.6	43.3
	36.0	43.3
	17 25.0	44.0
	28.3	44.0
11	23 29.7	45.5
	24.6	45.6
	5 21.5	45.7
	24.1	45.6

Fig. VIII

**Topographies
of
Magnetic Stations**

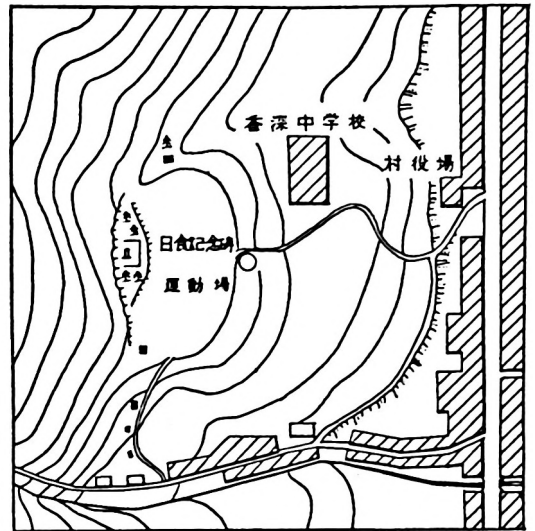
No. 1 Wakkanai

稚内



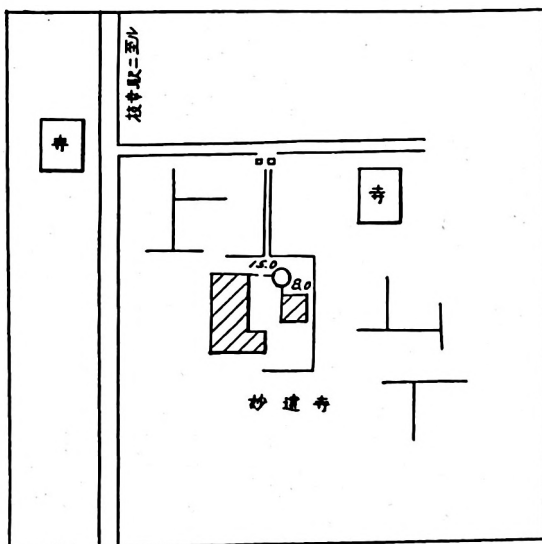
No. 2 Kabuka

香深



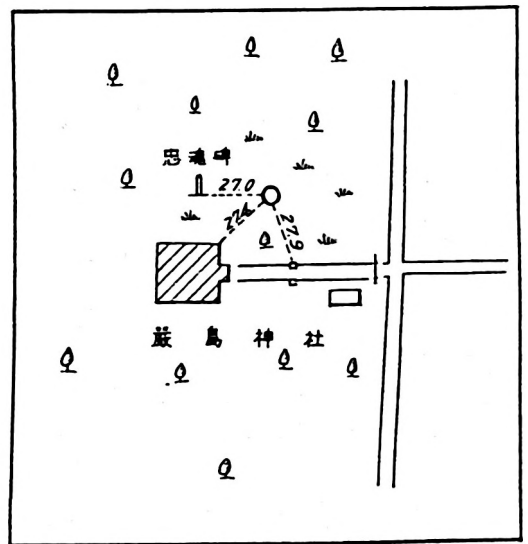
No. 3 Esasi

枝幸



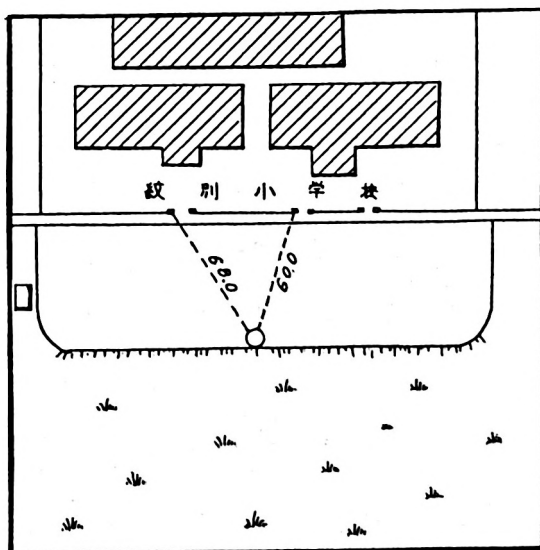
No. 4 Yagisiri

焼尻



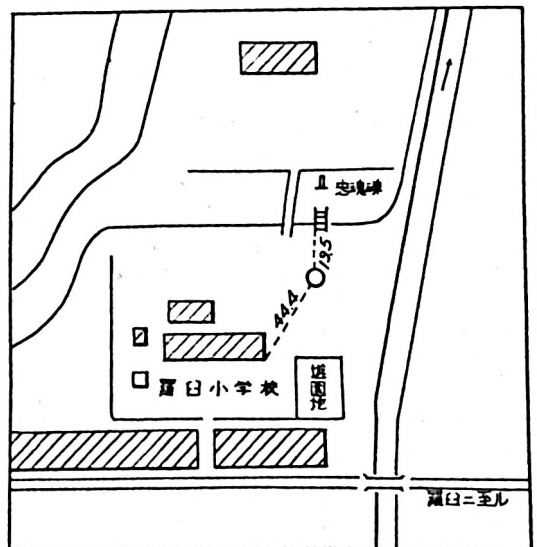
No. 5 Monbetu

紋別

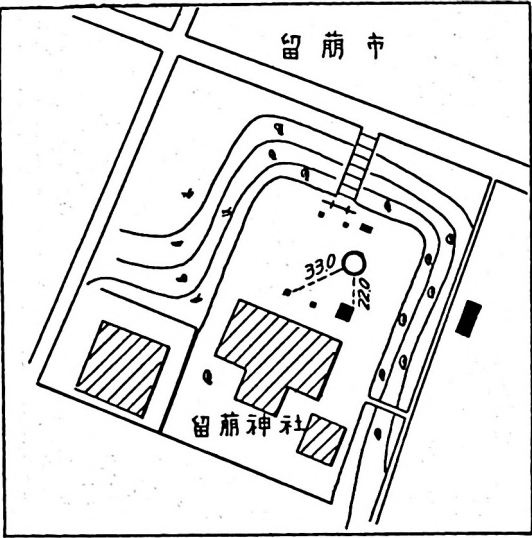


No. 6 Rausu

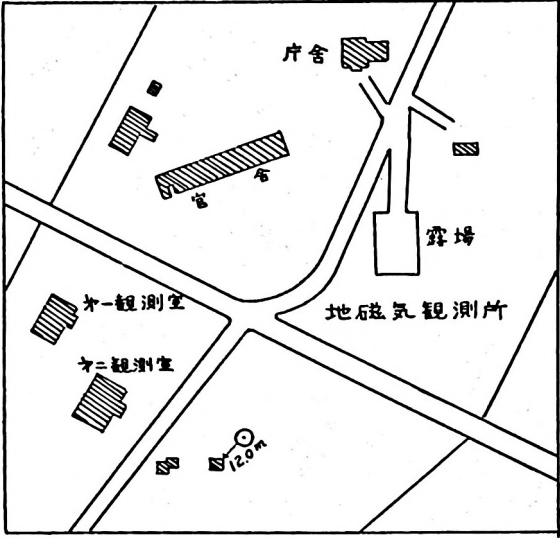
羅臼



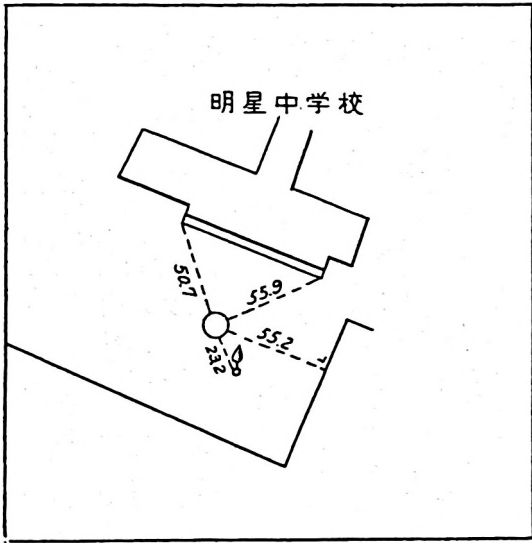
No. 7 Rumoi
留 萌



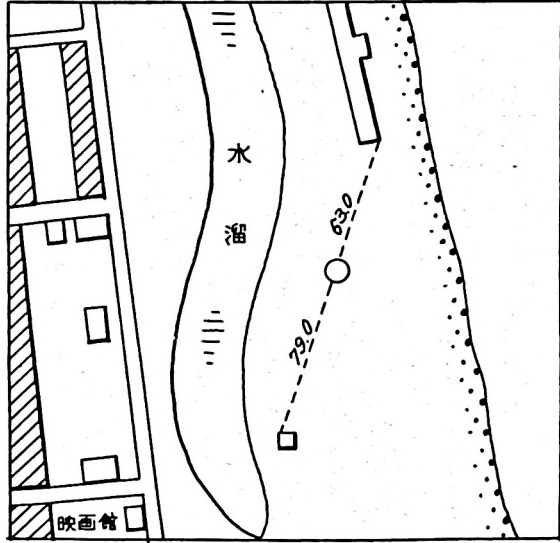
No. 8 Memanbetu
女 満 別



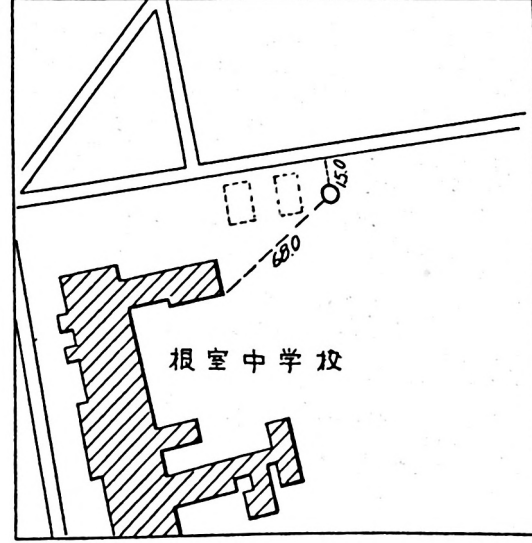
No. 9 Asahigawa
旭 川



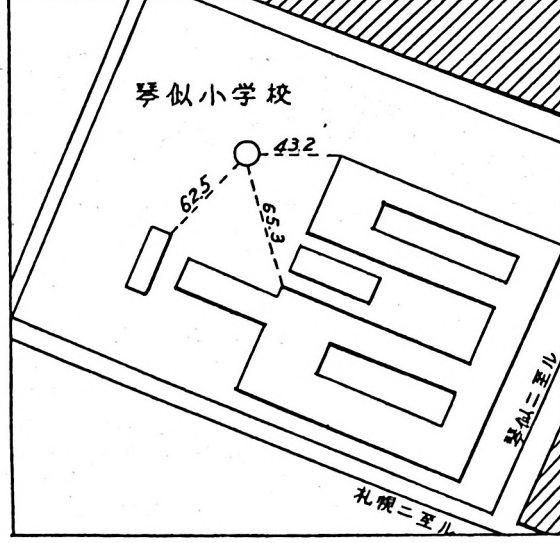
No. 10 Sibetu
標 津



No. 11 Nemuro
根 室

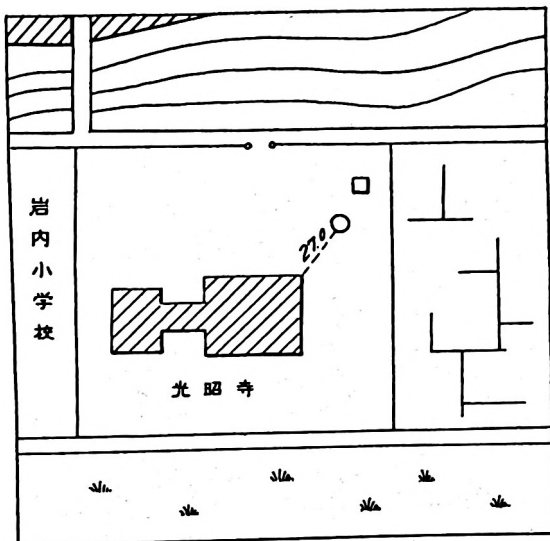


No. 12 Kotoni
琴 似



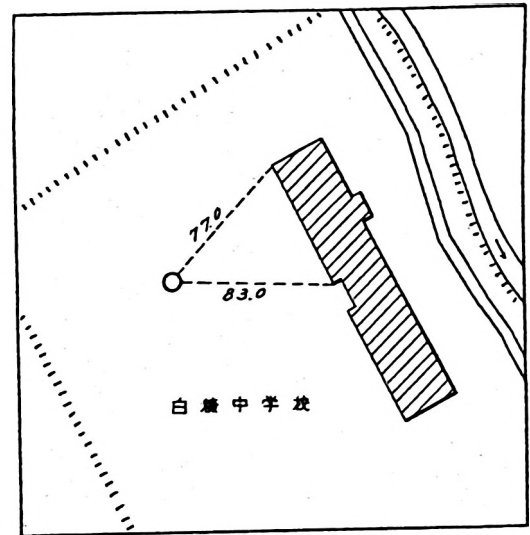
No. 13 Iwanai

岩内



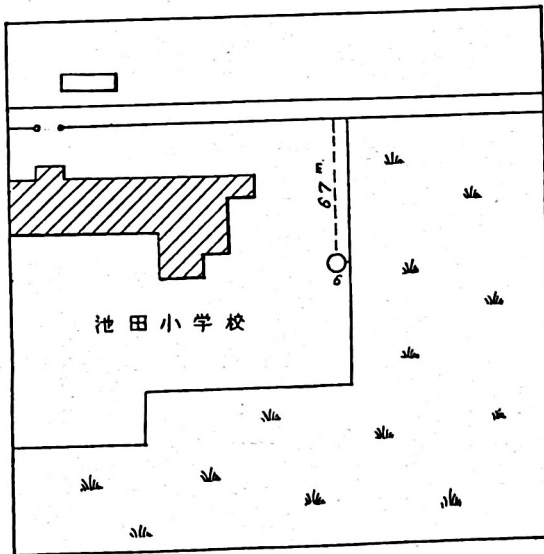
No. 14 Siranuka

白糠



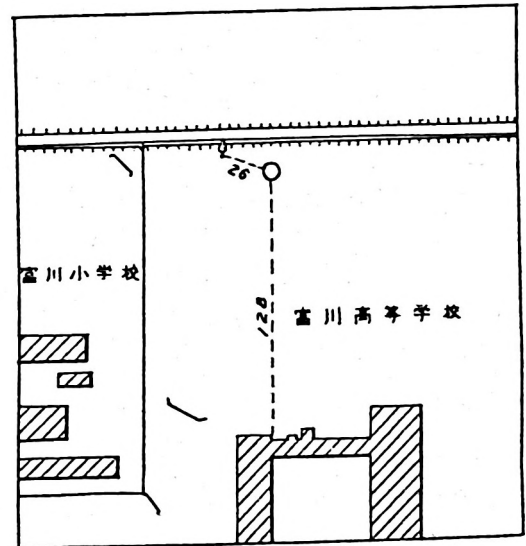
No. 15 Ikeda

池田



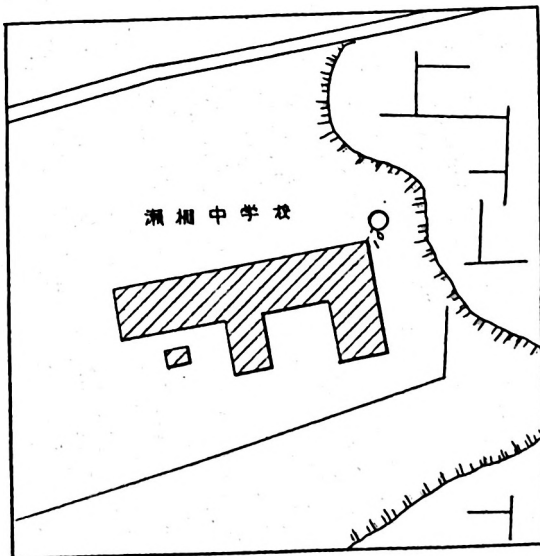
No. 16 Tomikawa

富川



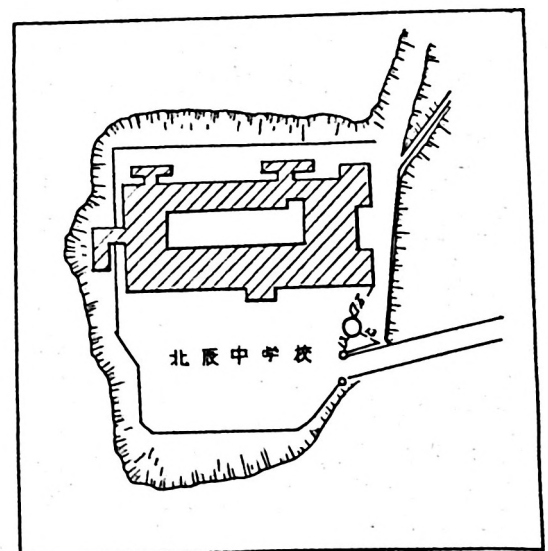
No. 17 Setana

瀬棚

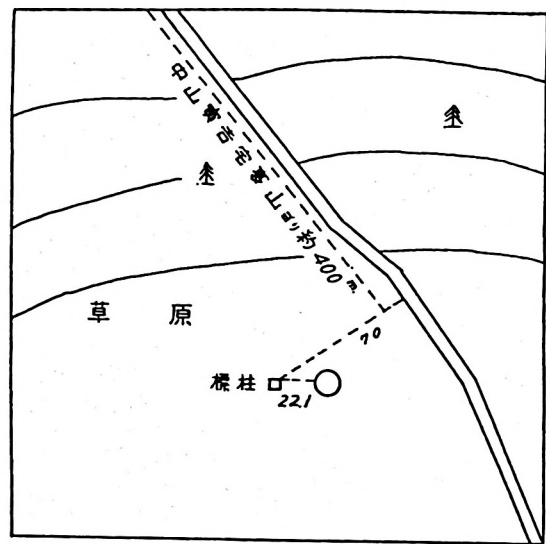


No. 18 Muroran

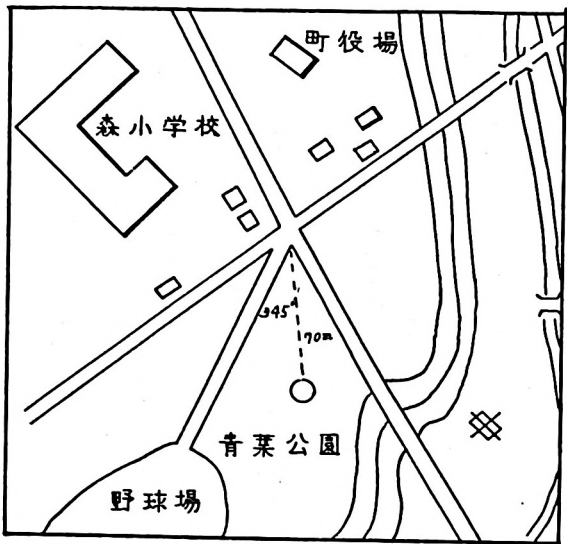
室蘭



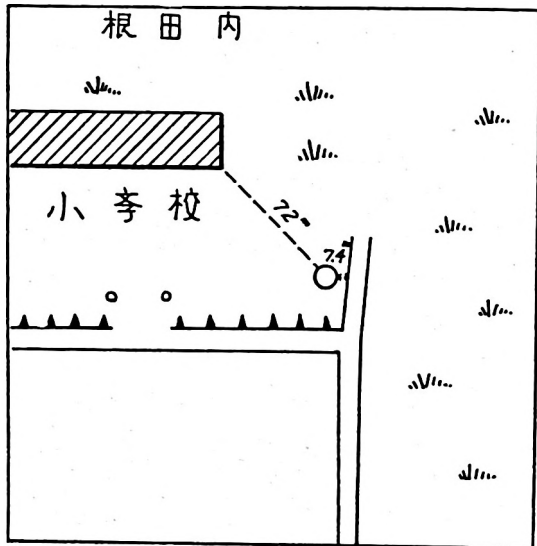
No. 19 Hiroo
広尾



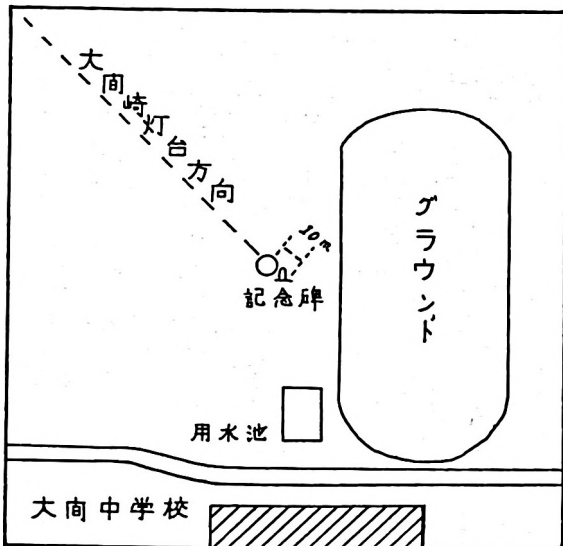
No. 20 Mori
森



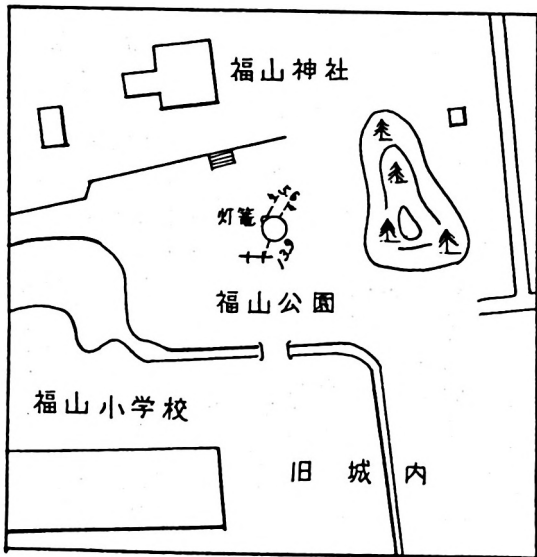
No. 21 Esan
恵山



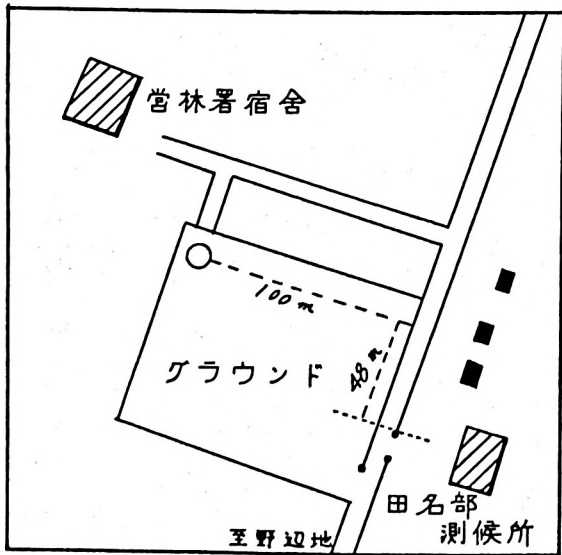
No. 22 Ōma
大間



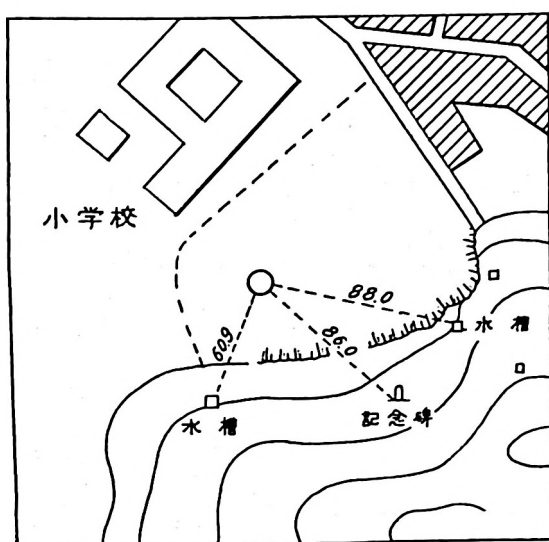
No. 23 Matumae
松前



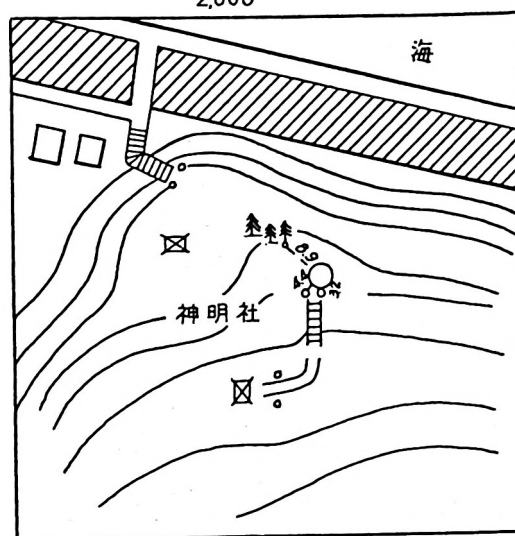
No. 24 Tanabu
田名部



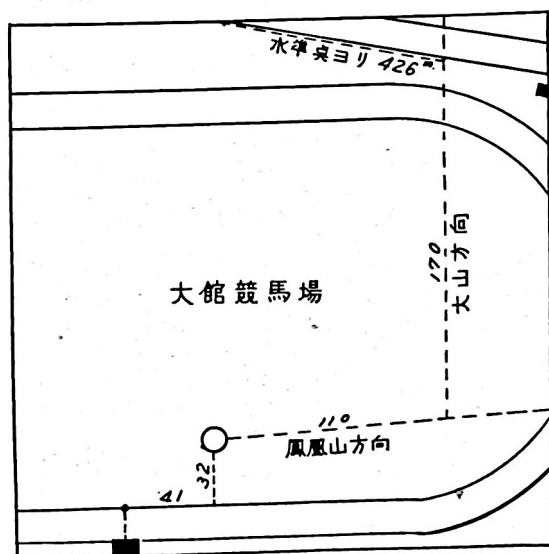
No. 25 Nohezi
野辺地



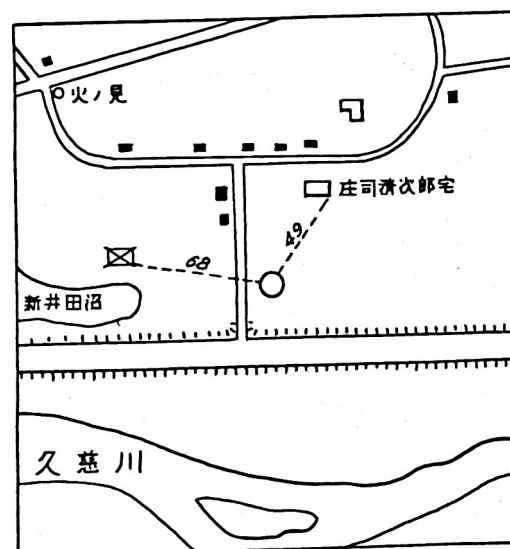
No. 26 Azigasawa
鯨ヶ沢
1/2,000



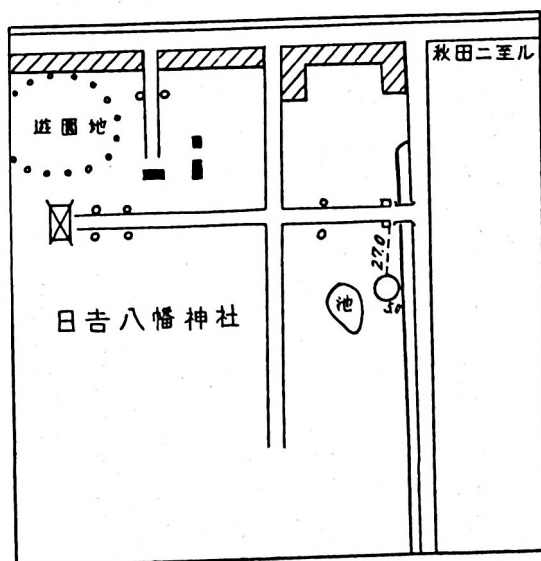
No. 27 Ōdate
大館



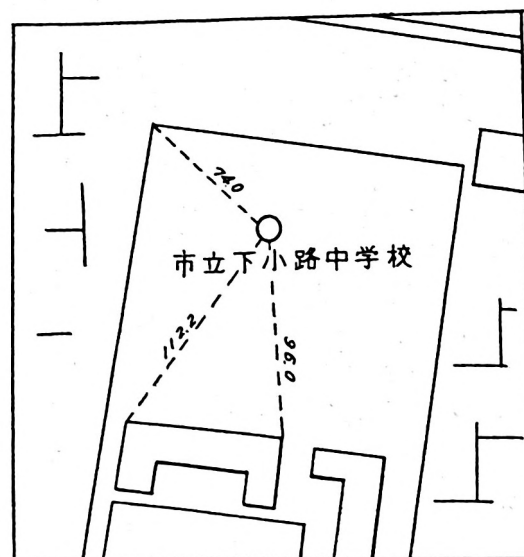
No. 28 Kuzi
久慈



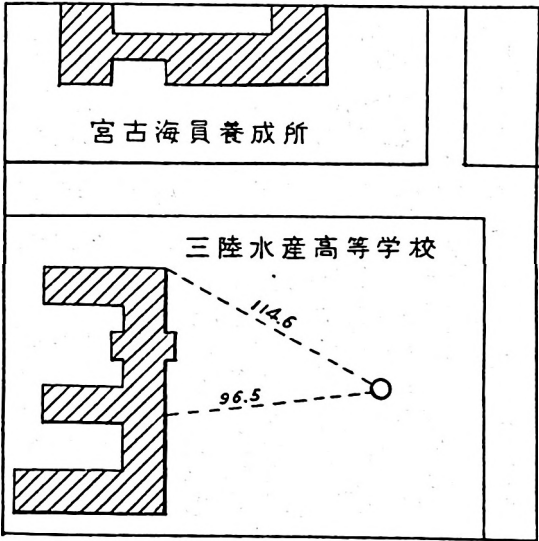
No. 29 Akita
秋田



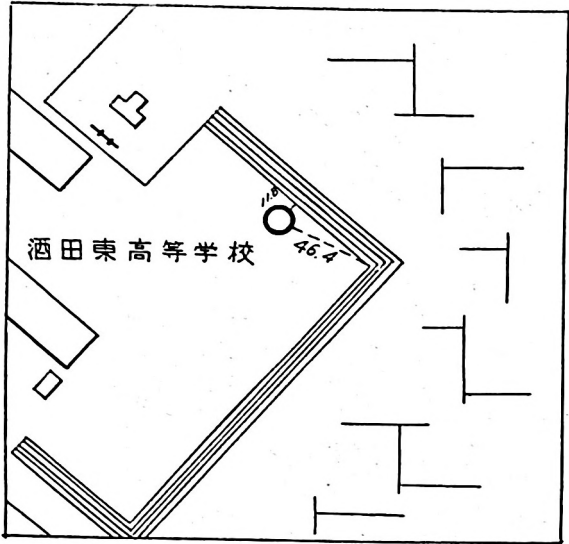
No. 30 Morioka
盛岡



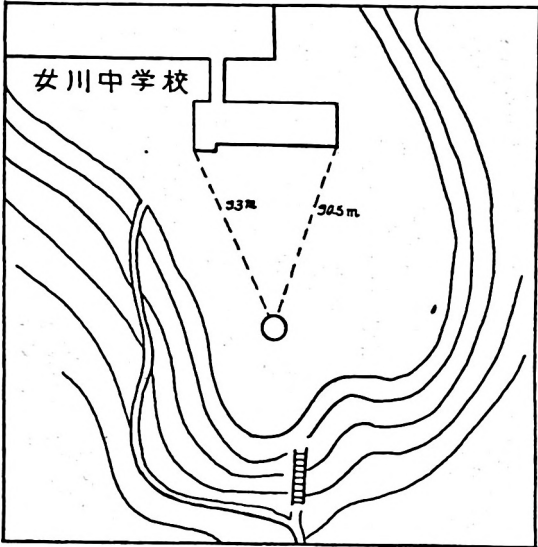
No. 31 Miyako
宮古



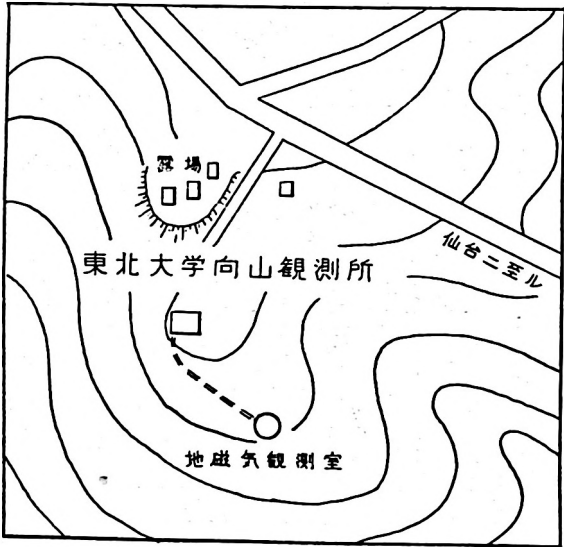
No. 32 Sakata
酒田



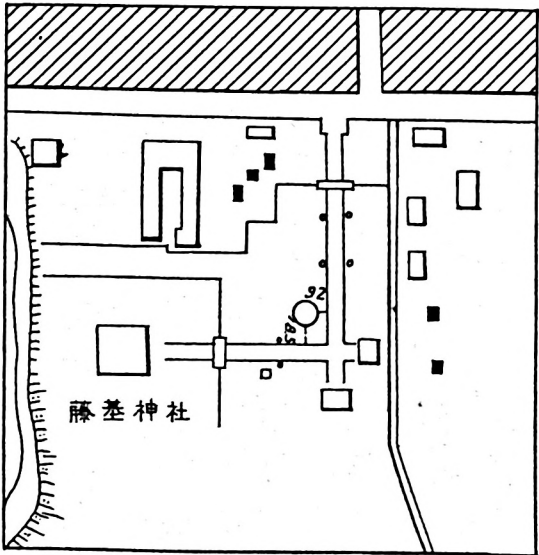
No. 33 Onagawa
女川



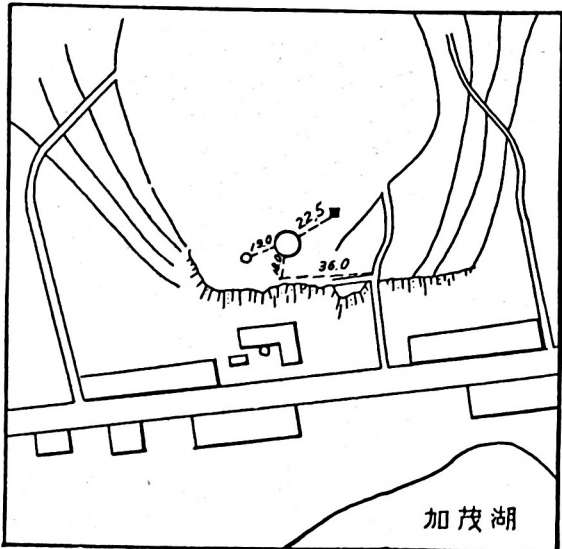
No. 34 Sendai
仙台



No. 35 Murakami
村上

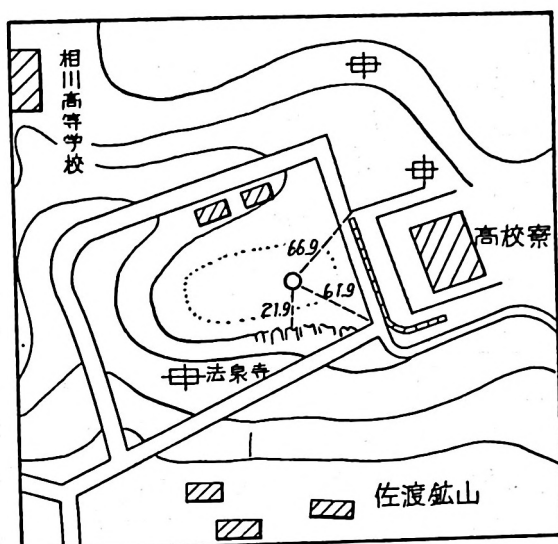


No. 36 Ryōtu
両津



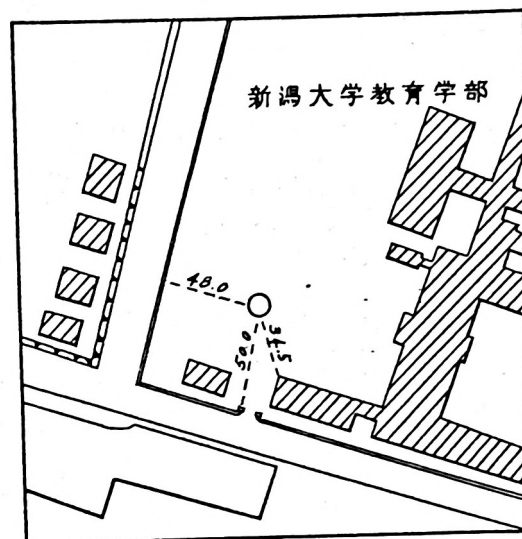
No. 37 Aikawa

相川



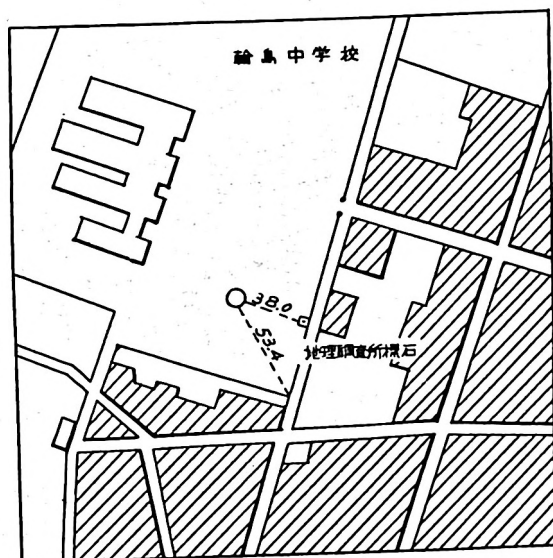
No. 38 Niigata

新潟



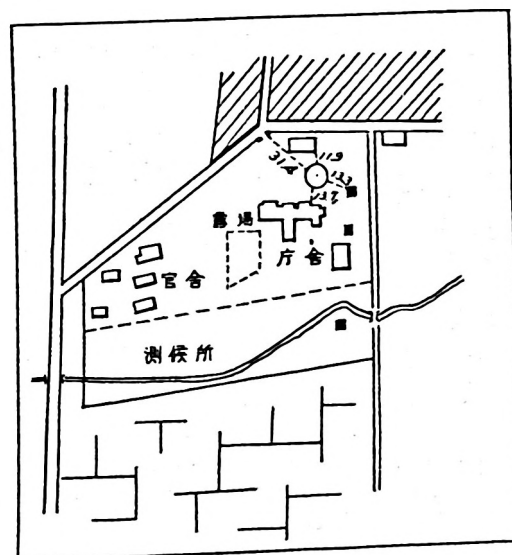
No. 39 Wazima 1

輪島 1



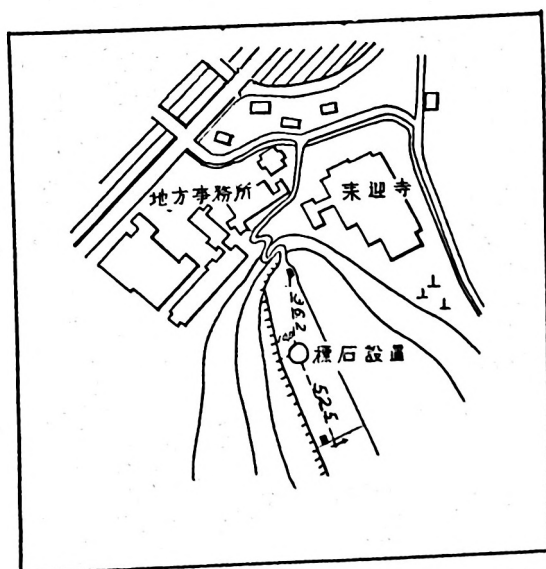
No. 40 Wazima 2

輪島 2



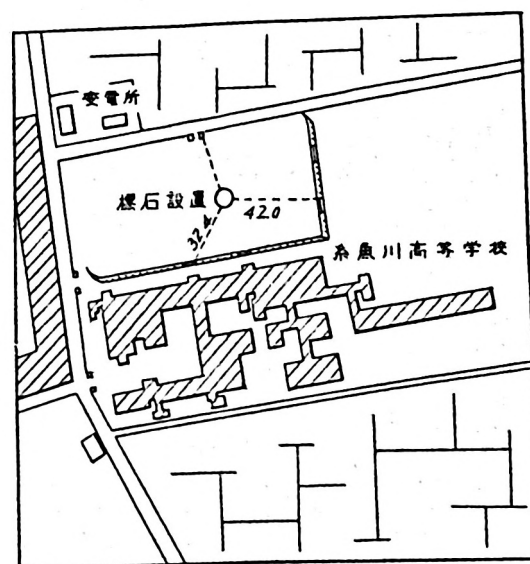
No. 41 Tōkamati

十日町

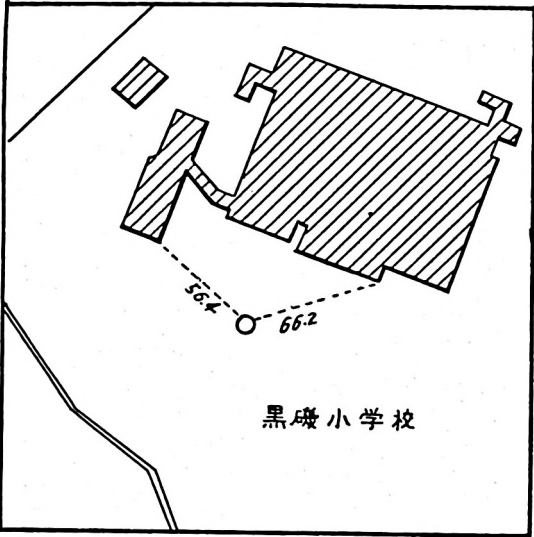


No. 42 Itoigawa

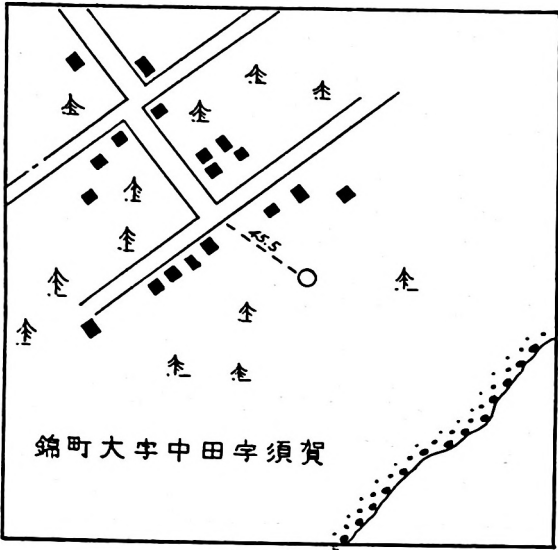
糸魚川



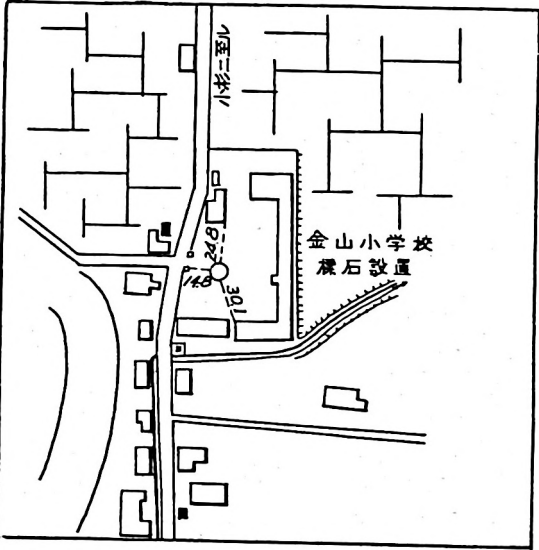
No. 43 Kuroiso
黒磯



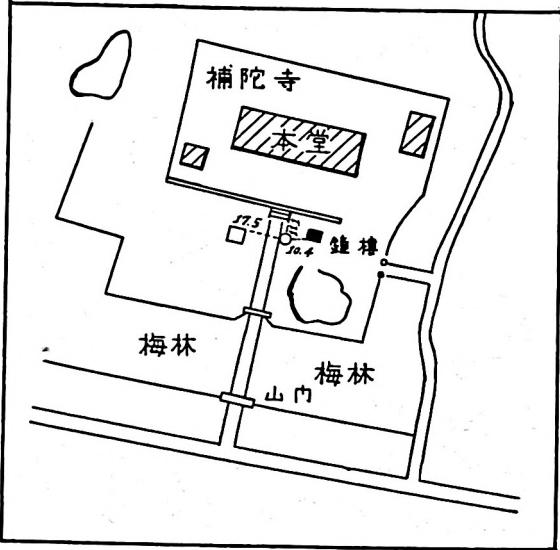
No. 44 Ueda
植田



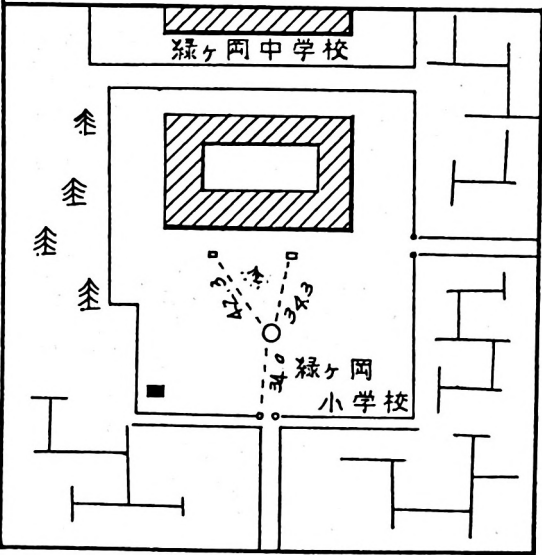
No. 45 Toyama
富山



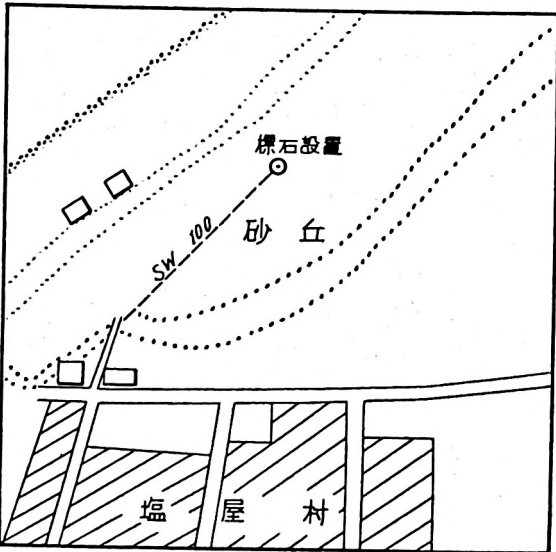
No. 46 Matuida
松井田



No. 47 Mito
水戸



No. 48 Sioya
塩屋



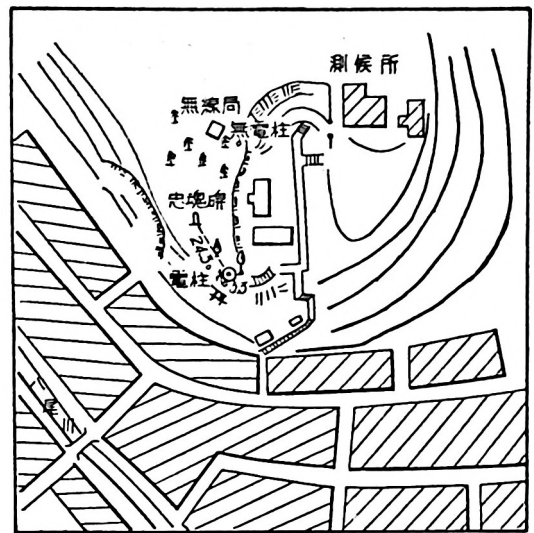
No. 49 Saigō 1

西郷 1



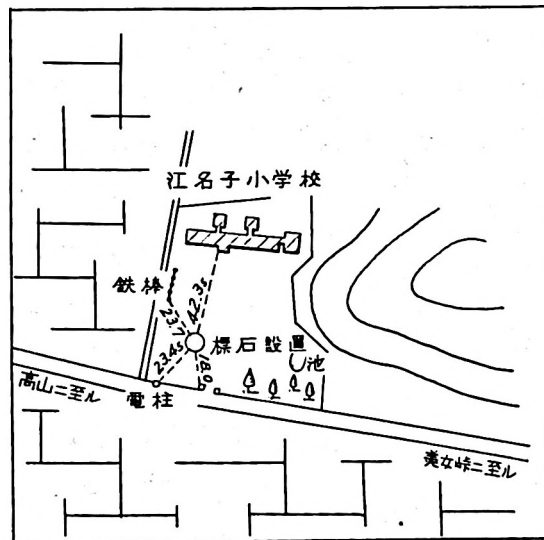
No. 50 Saigō 2

西郷 2



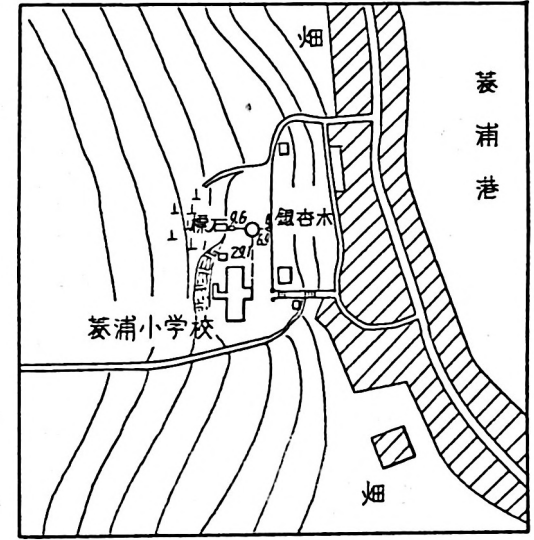
No. 51 Takayama

高山



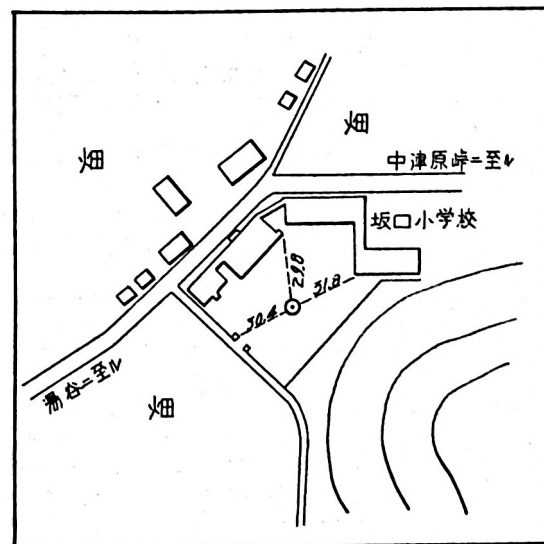
No. 52 Hisiura

菱浦



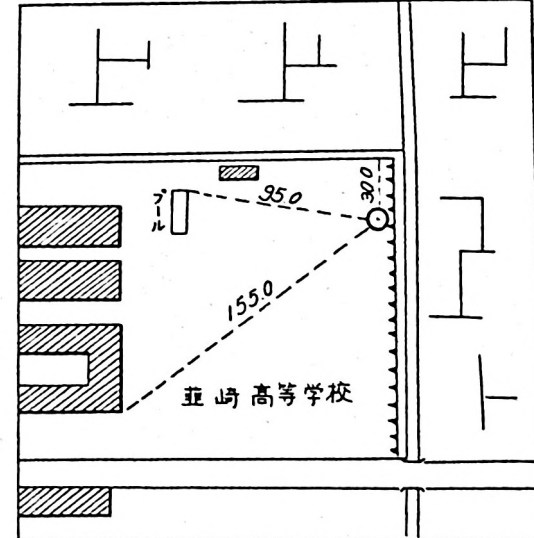
No. 53 Takehu

武生

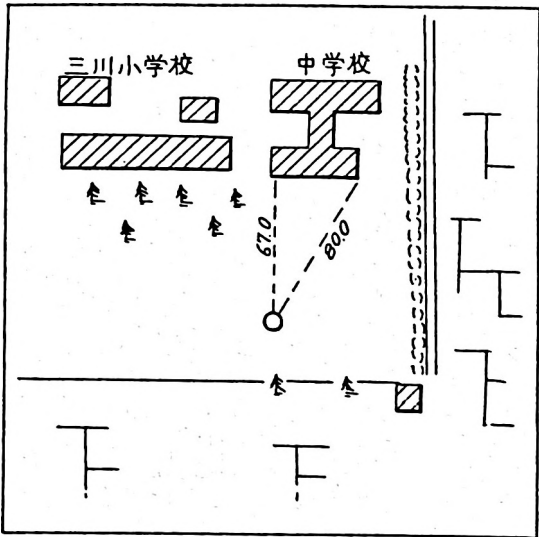


No. 54 Nirasaki

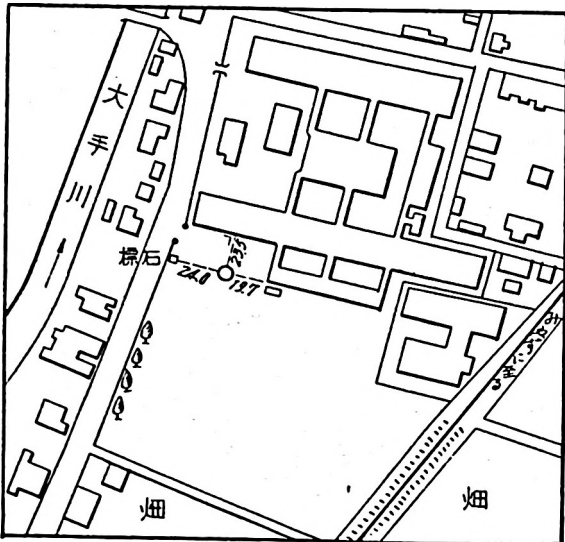
韭崎



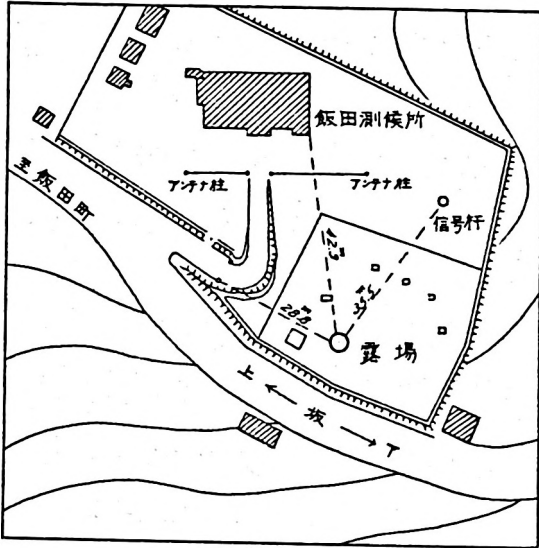
No. 55 Iioka
飯 岡



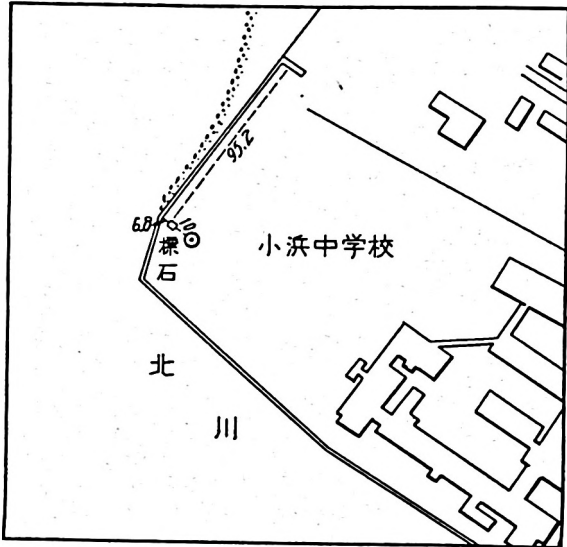
No. 56 Miyazu
宮 津



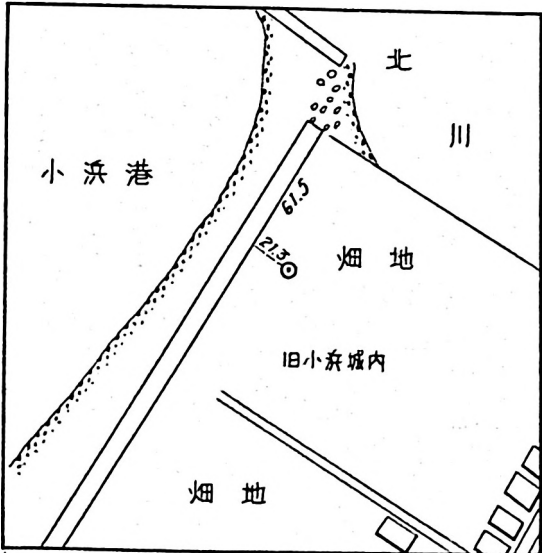
No. 57 Iida
飯 田



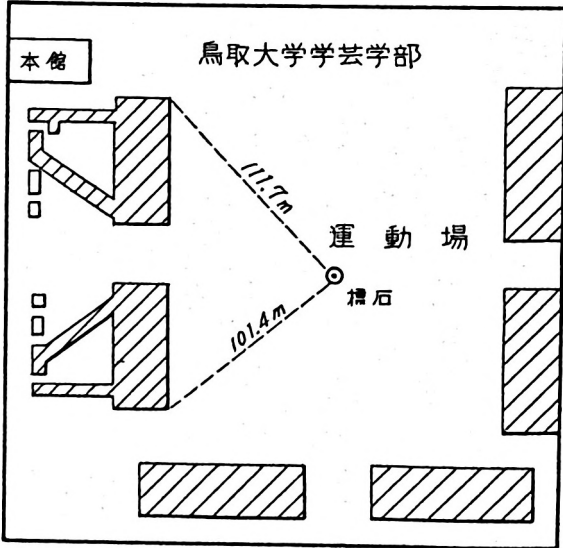
No. 58 Obama 1
小 浜 1



No. 59 Obama 2
小 浜 2

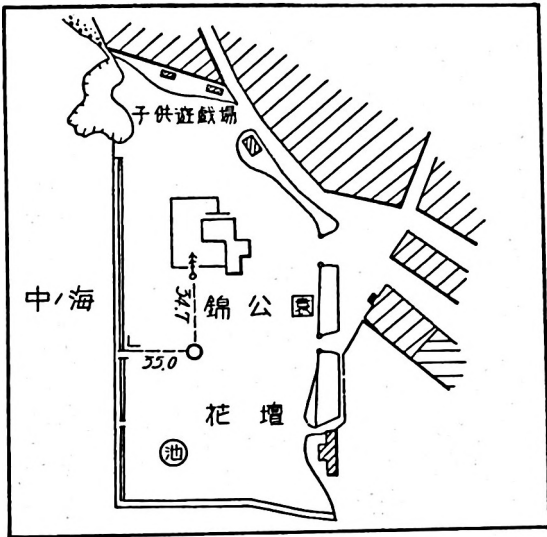


No. 60 Tottori
鳥 取



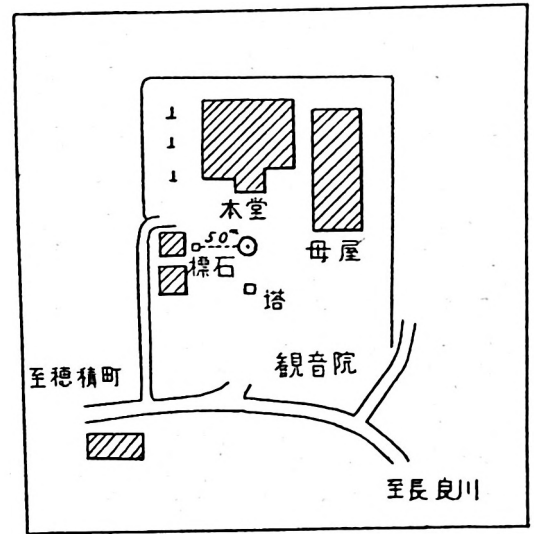
No. 61 Yonago

米子



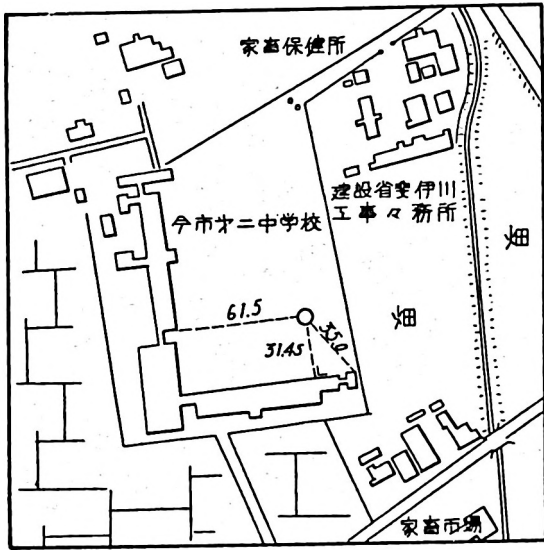
No. 62 Hozumi

穂積



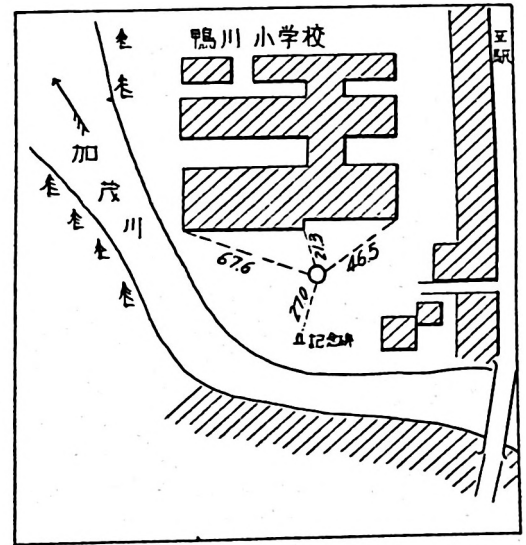
No. 63 Imaiti

出雲今市



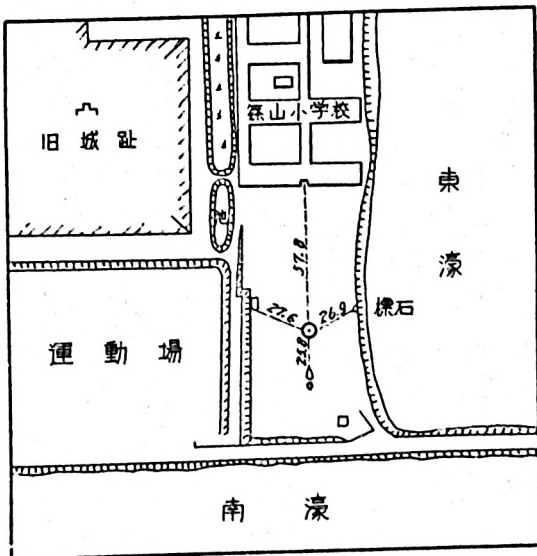
No. 64 Kamogawa

鴨川



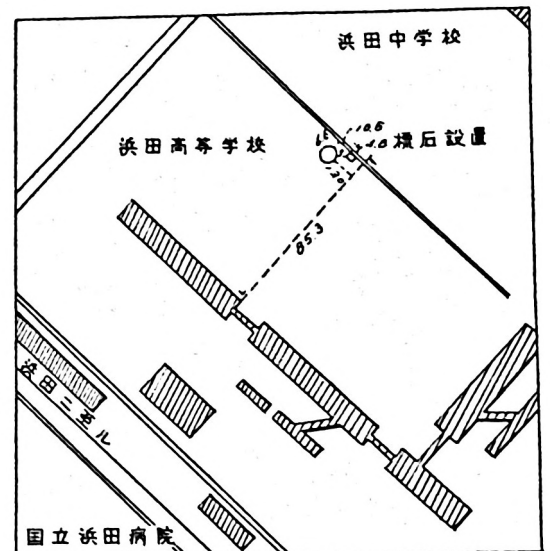
No. 65 Sasayama

篠山



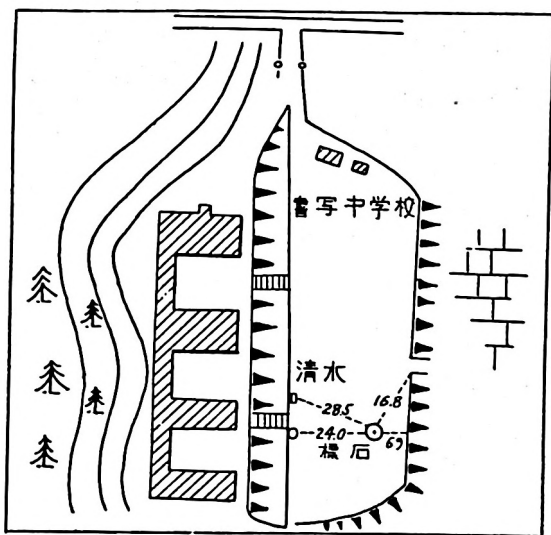
No. 66 Hamada

浜田



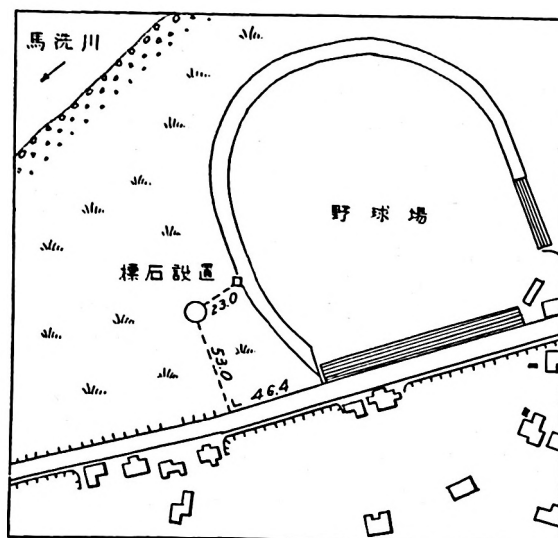
No. 67 Himezi

姫路



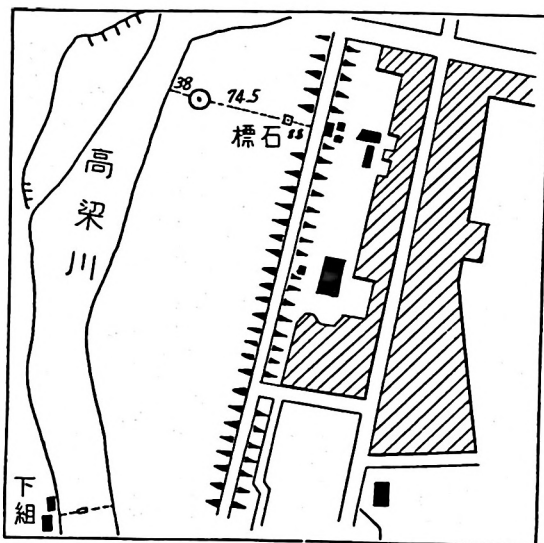
No. 68 Miyosi

三次



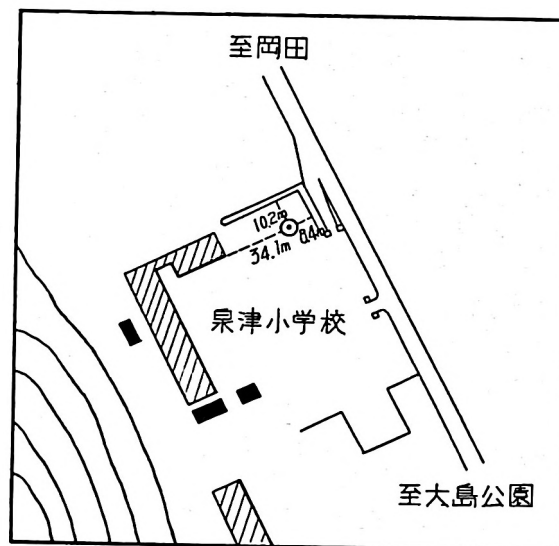
No. 69 Takahasi

高梁



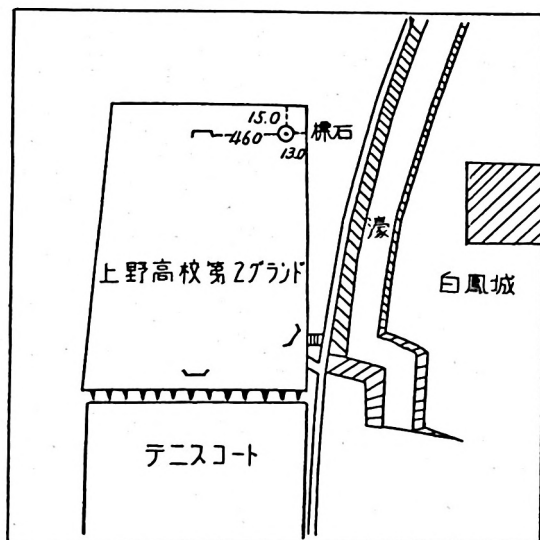
No. 70 Senzu, Ō-sima

泉津(大島)



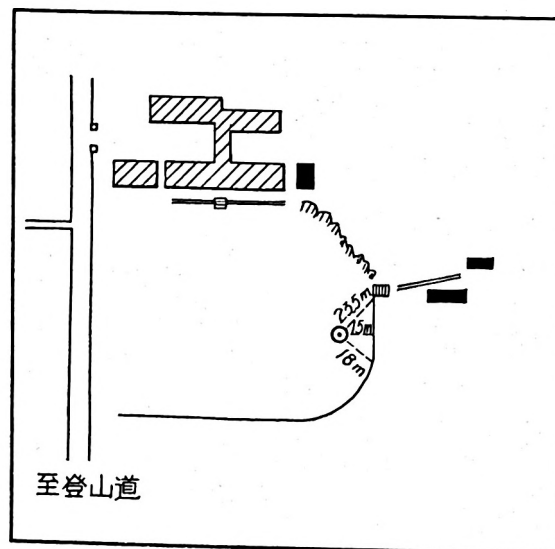
No. 71 Ueno

上野(伊賀)



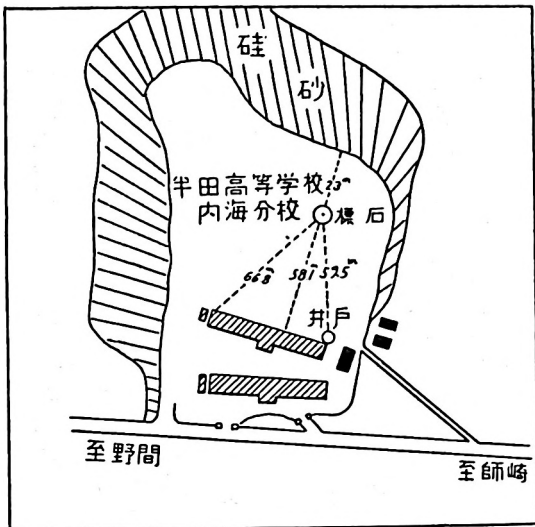
No. 72 Motomura, Ō-sima

元村(大島)



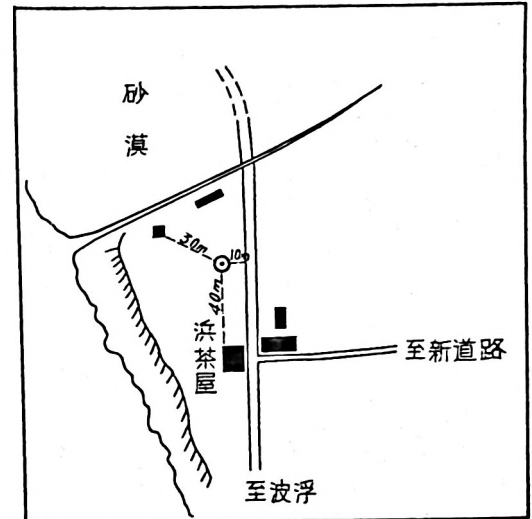
No. 73 Utumi

内海



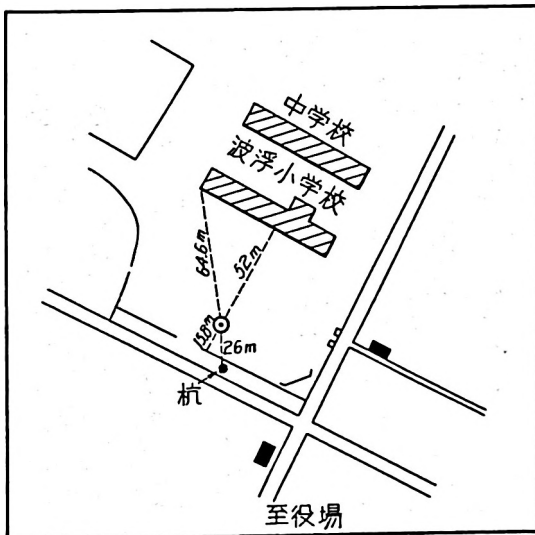
No. 74 Mabuse, Ō-sima

間伏(大島)



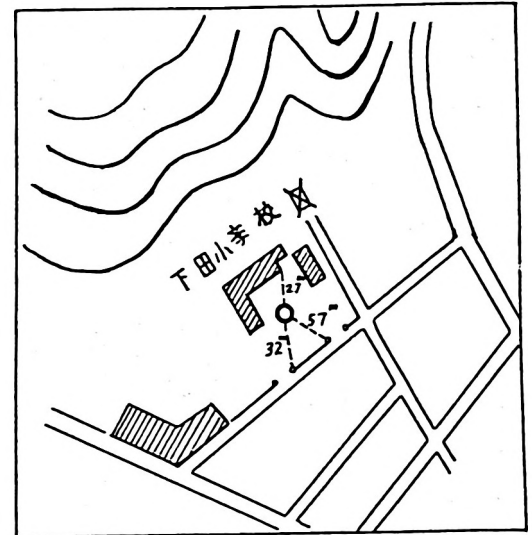
No. 75 Habu, Ō-sima

波浮(大島)



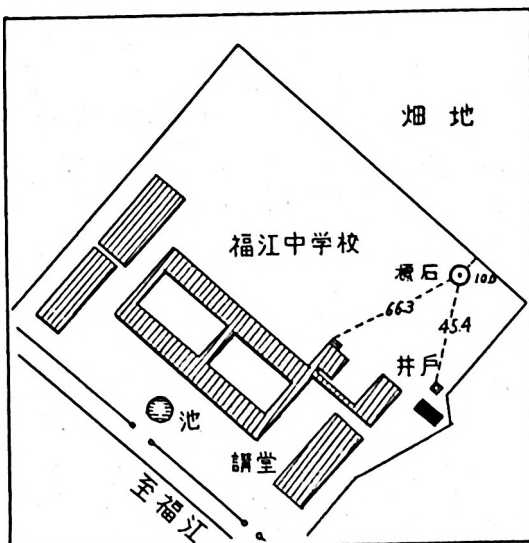
No. 76 Simoda

下田



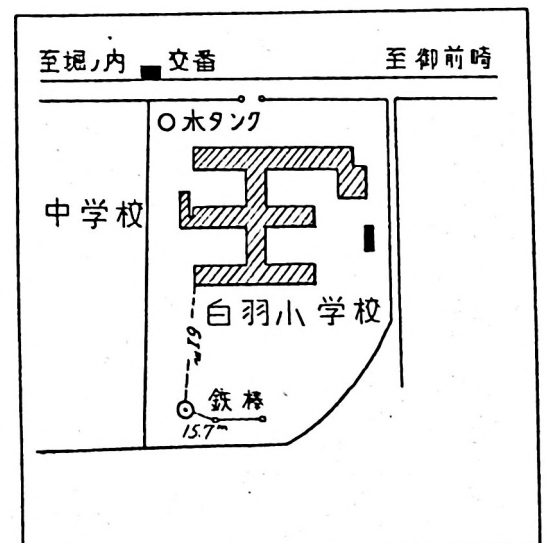
No. 77 Hukue

福江



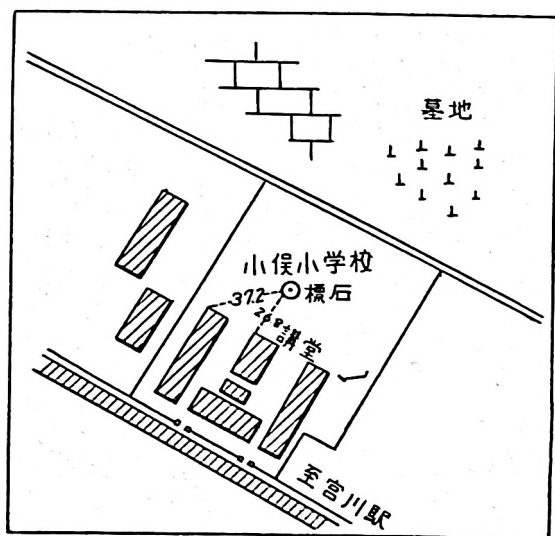
No. 78 Omaezaki

御前崎



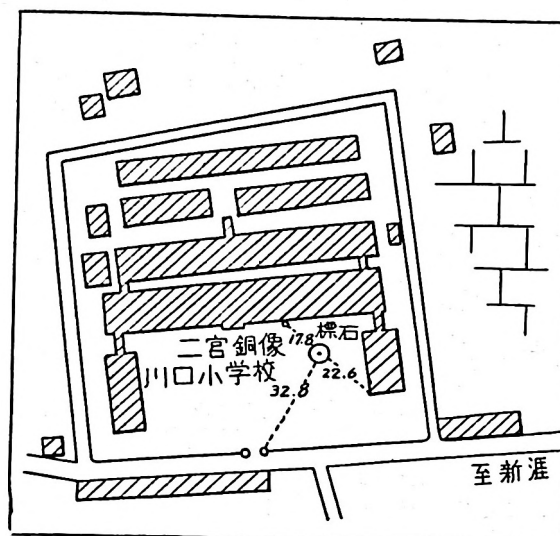
No. 79 Miyagawa

宮川



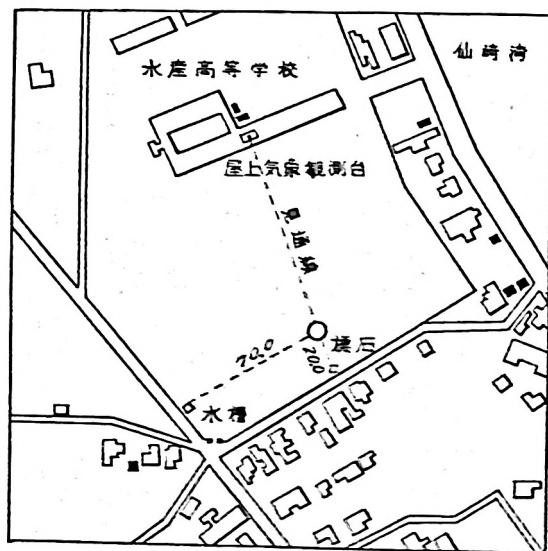
No. 80 Hukuyama

福山



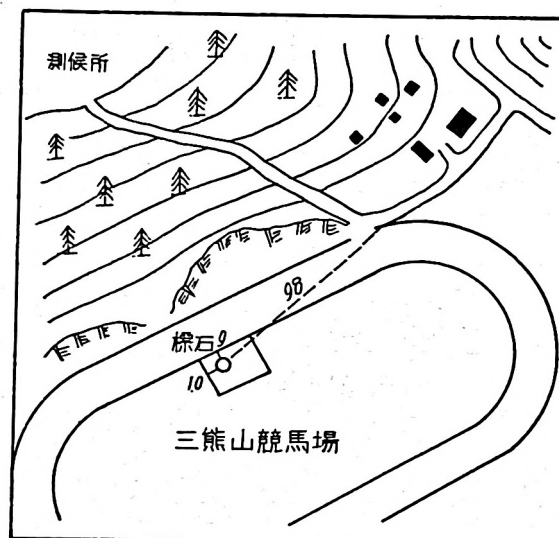
No. 81 Senzaki

仙崎



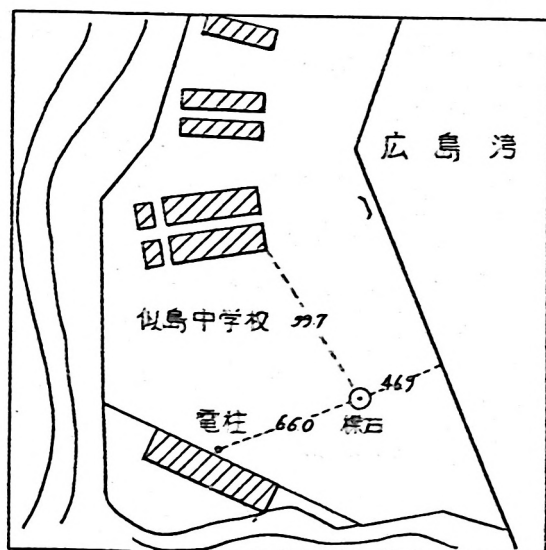
No. 82 Sumoto

洲本



No. 83 Hiroshima

広島



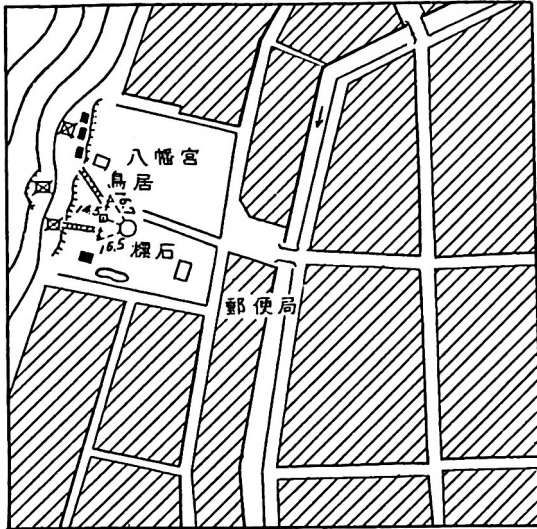
No. 84 Nagasima

長島



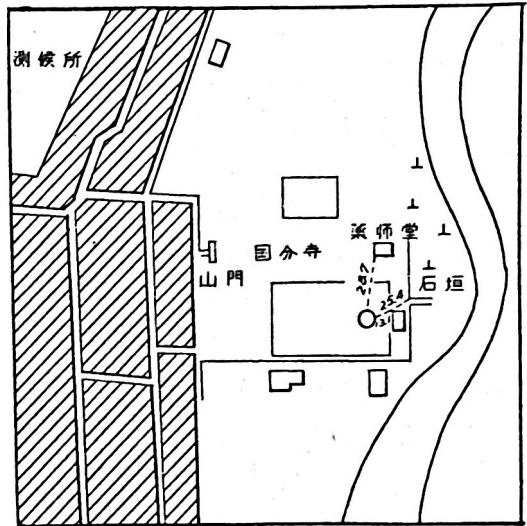
No. 85 Izuhara 1

巖原 1



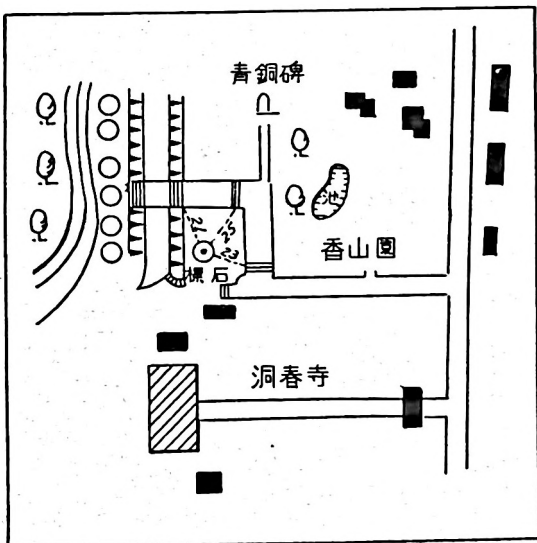
No. 86 Izuhara 2

巖原 2



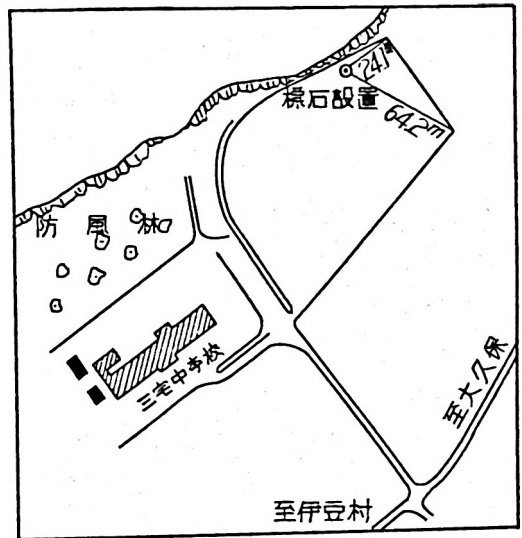
No. 87 Yamaguti

山口



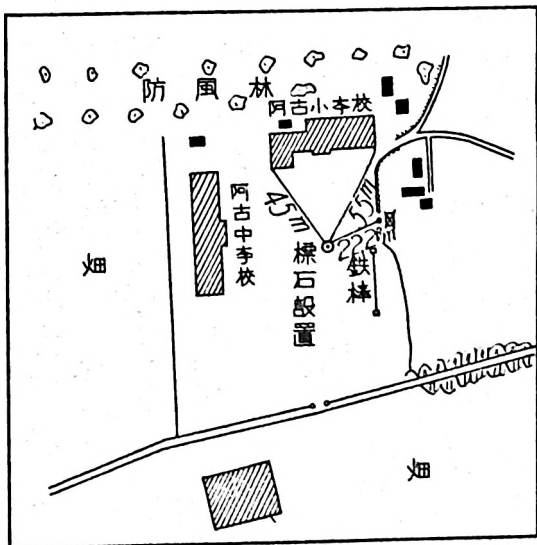
No. 88 Izu, Miyake-sima

伊豆(三宅島)



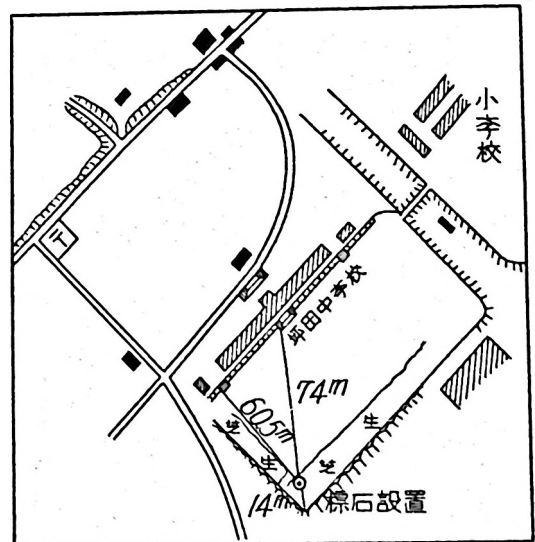
No. 89 Ako, Miyake-sima

阿古(三宅島)

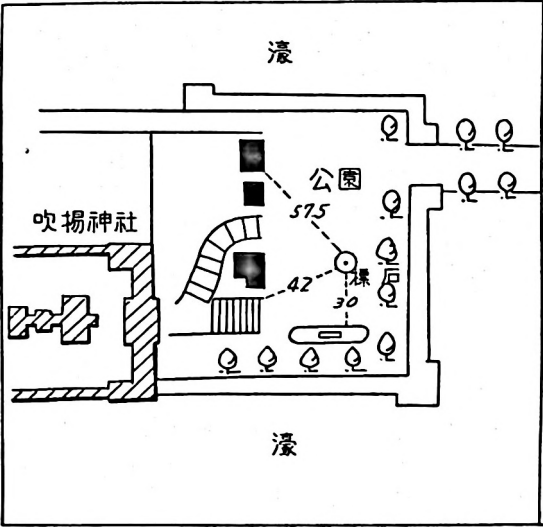


No. 90 Tubota, Miyake-sima

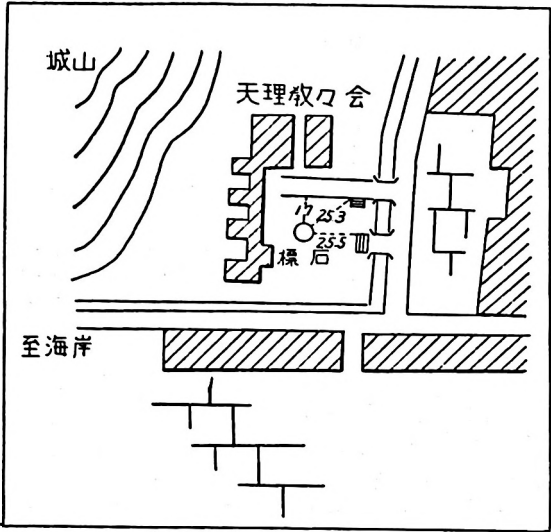
坪田(三宅島)



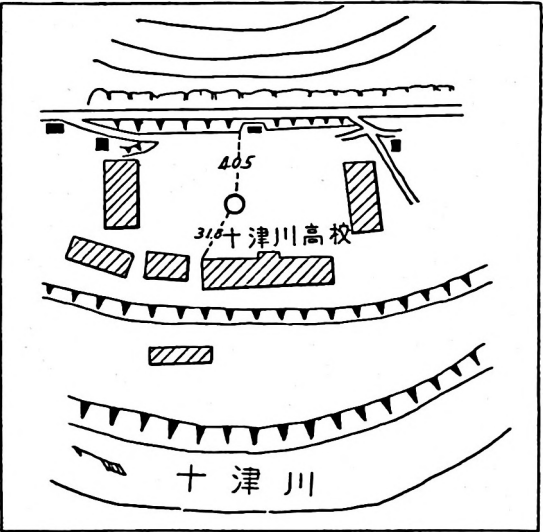
No. 91 Imabari
今 治



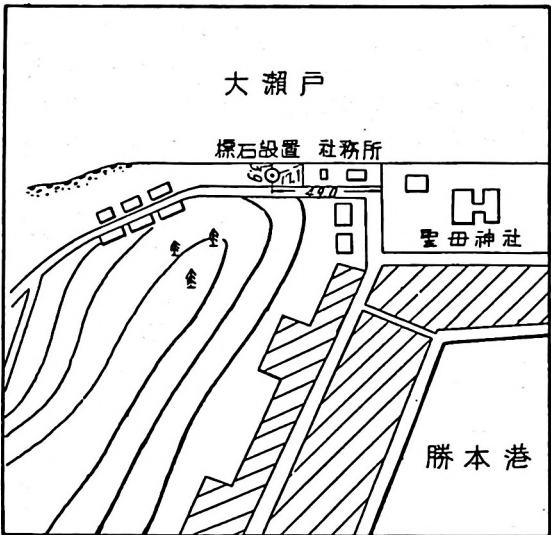
No. 92 Kawanoe
川 之 江



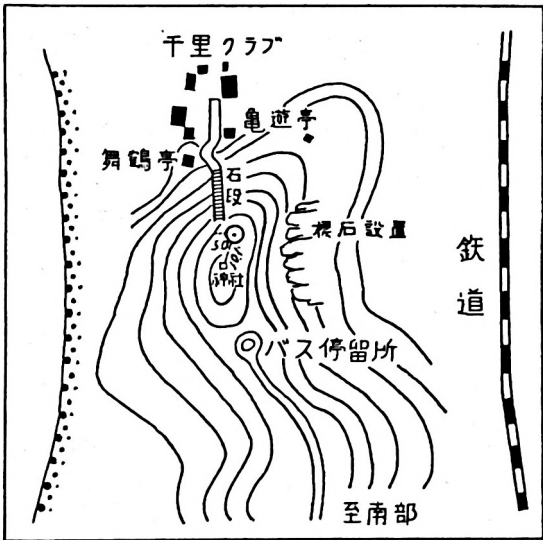
No. 93 Totugawa
十 津 川



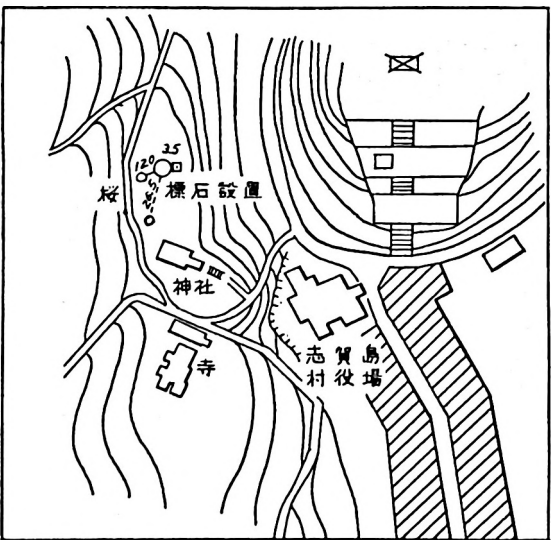
No. 94 Katumoto
勝 本



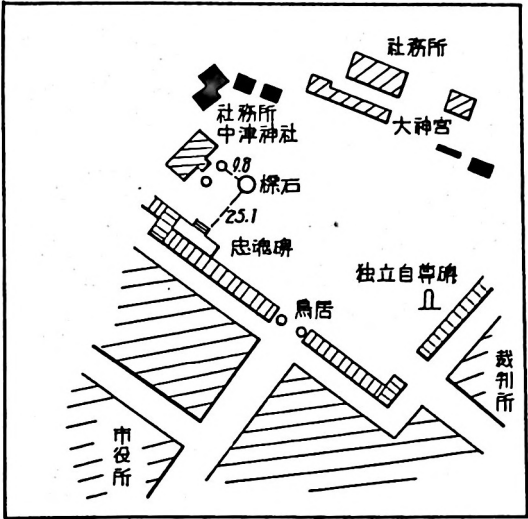
No. 95 Minabe
南 部



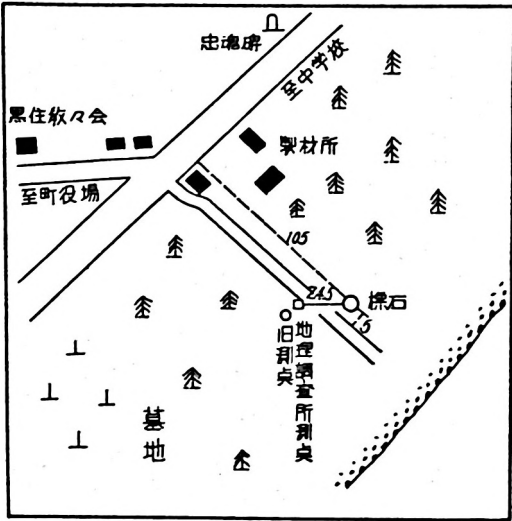
No. 96 Hukuoka
福 岡



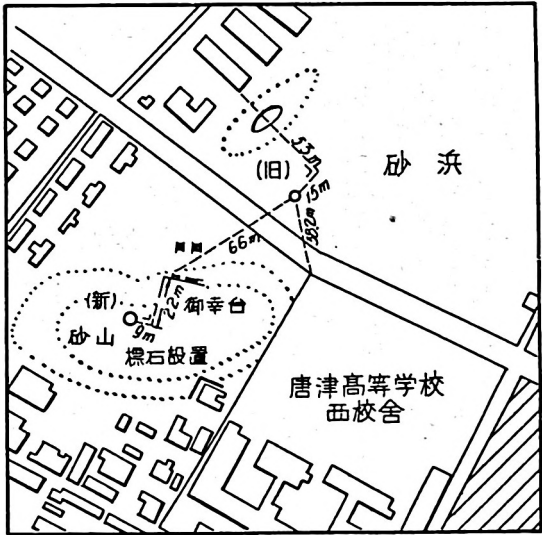
No. 97 Nakatu
中 津



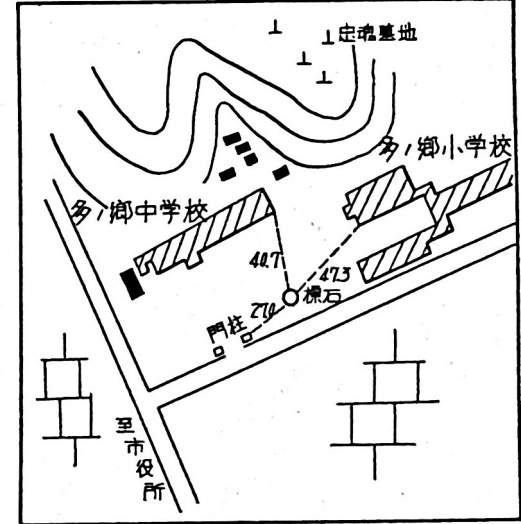
No. 98 Ōzato
大 里



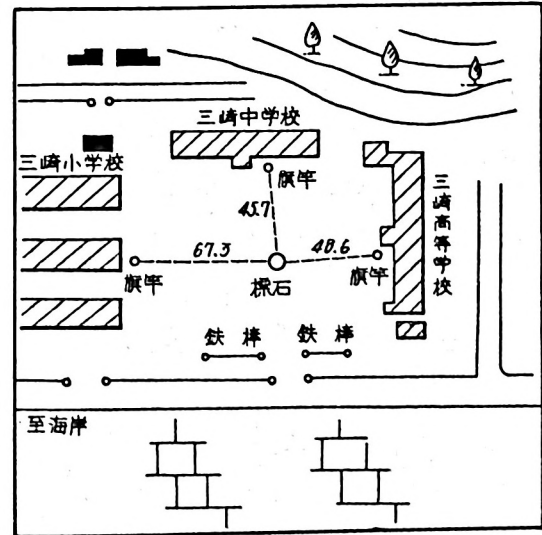
No. 99, 100 Karatu
唐 津



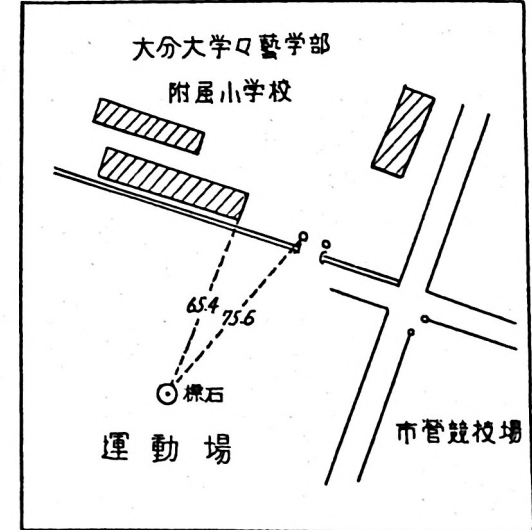
No. 101 Susaki
須 崎



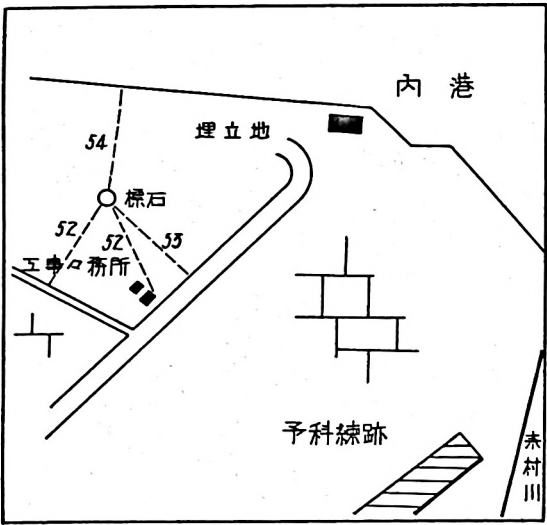
No. 102 Misaki
三 崎



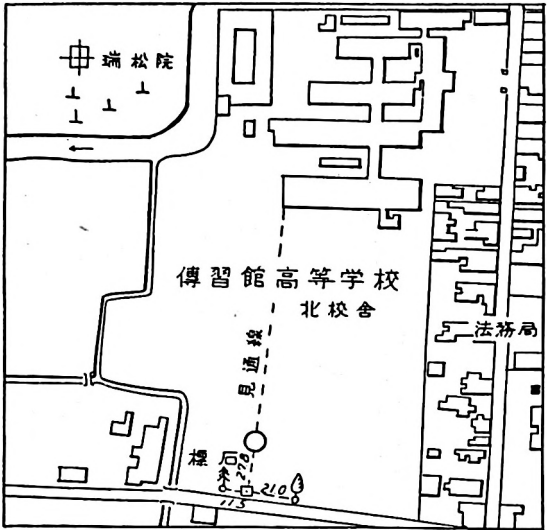
No. 103 Ōita
大 分



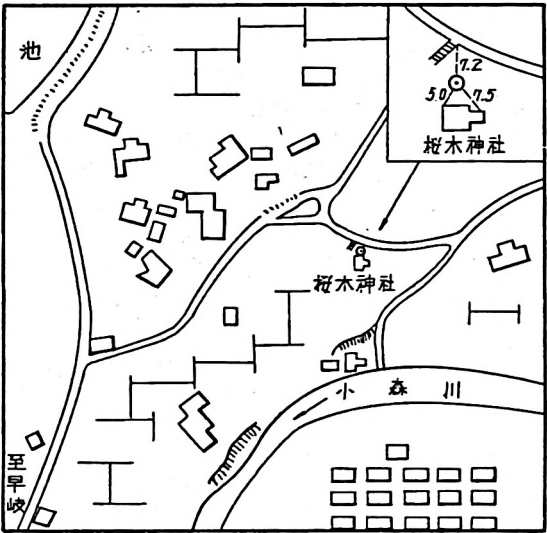
No. 104 Uwazima
宇和島



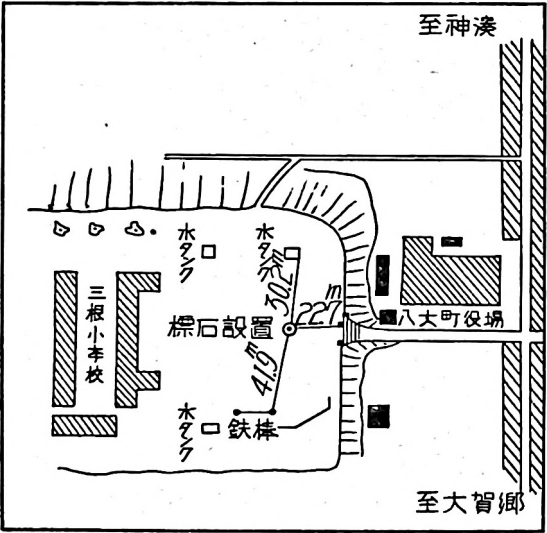
No. 105 Yanagawa
柳川



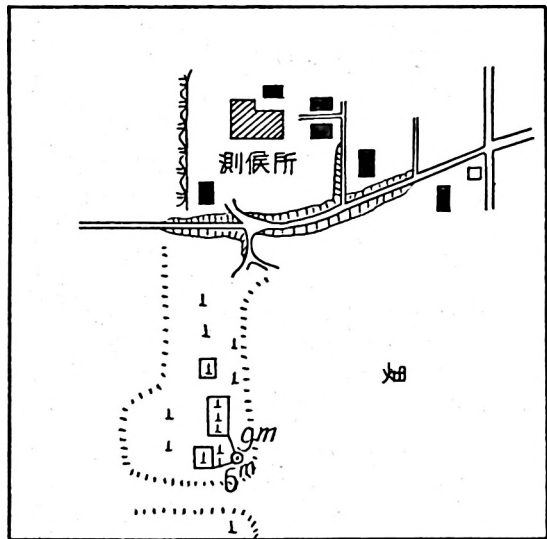
No. 106 Haiki
早岐



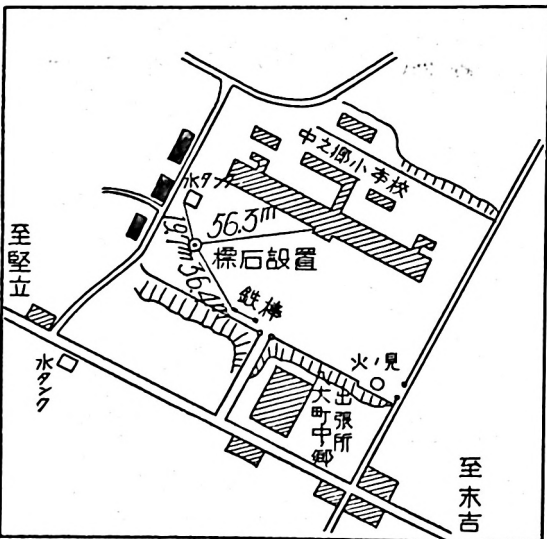
No. 107 Mitune, Hatizyō-Sima
三根(八丈島)



No. 108 Ōgagō, Hatizyō-sima
大賀郷(八丈島)

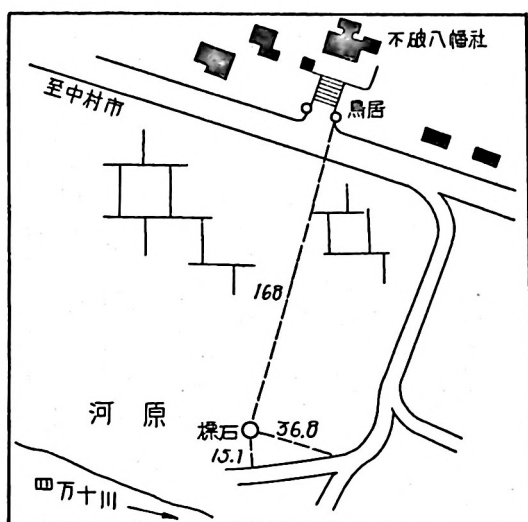


No. 109 Nakanogō, Hatizyō-sima
中之郷(八丈島)



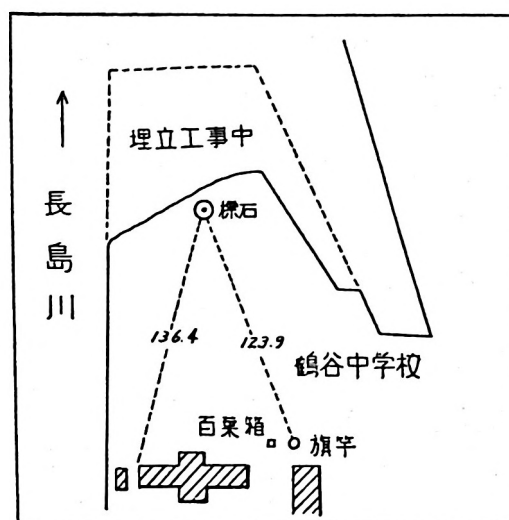
No. 110 Nakamura

中村



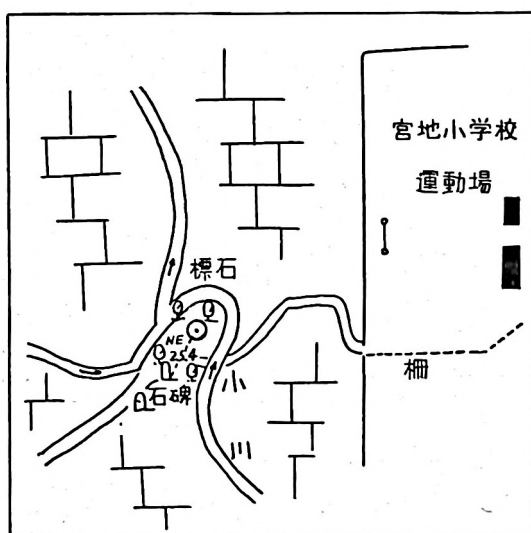
No. 111 Saeki

佐伯



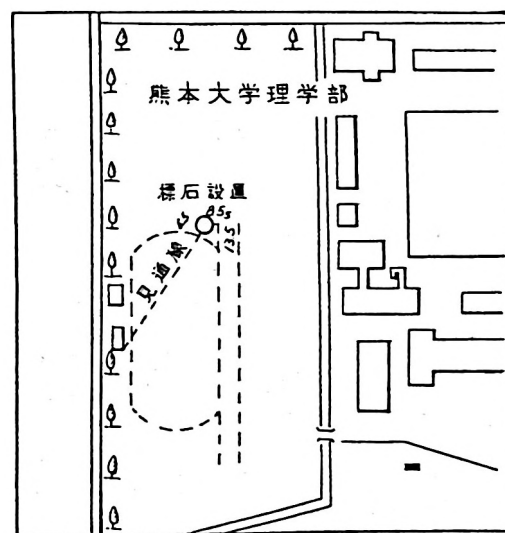
No. 112 Miyazi

宮地



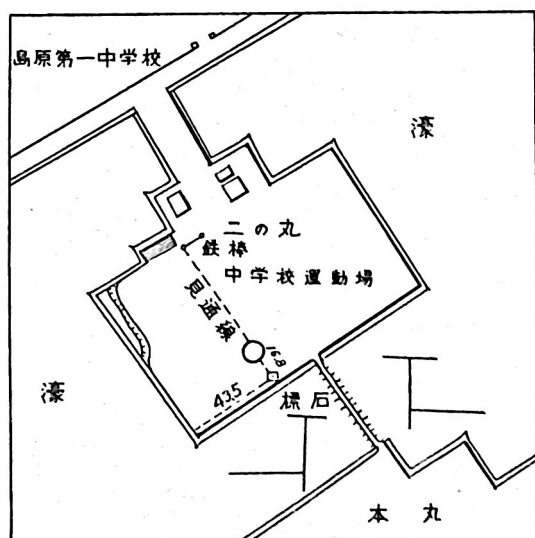
No. 113 Kumamoto

熊本



No. 114 Simabara

島原

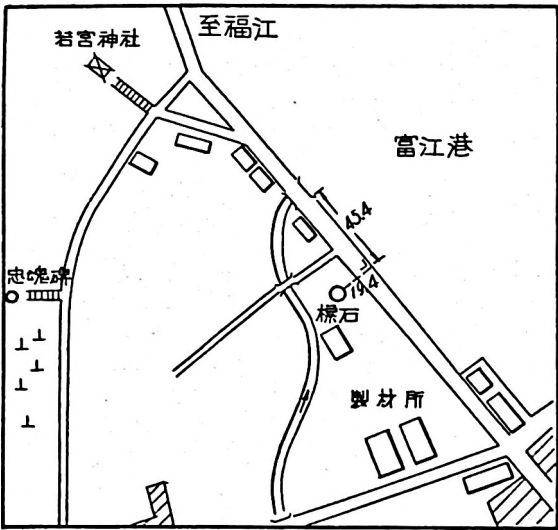


No. 115 Hukue

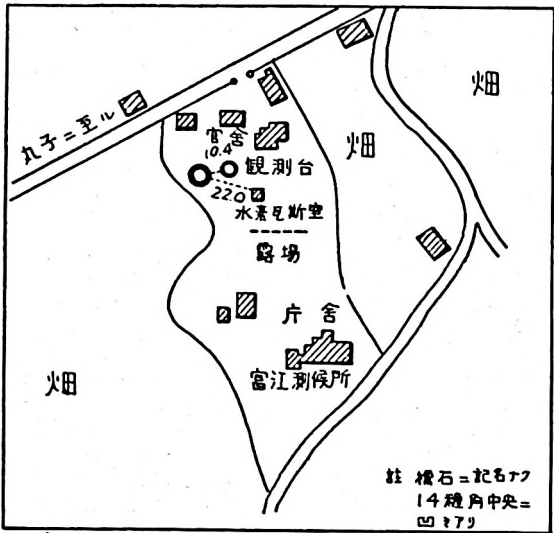
福江



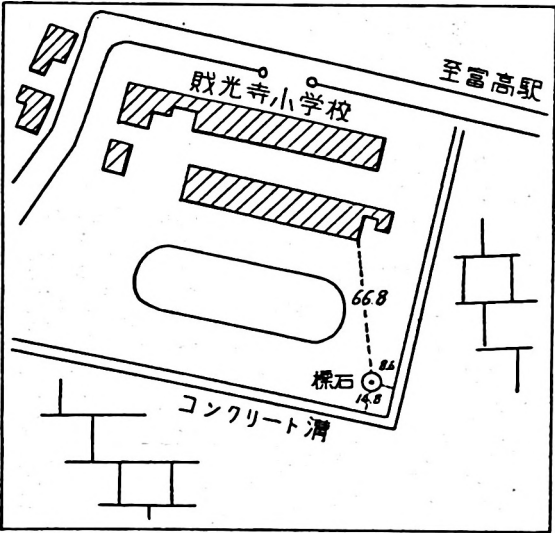
No. 116 Tomie 1
富江 1



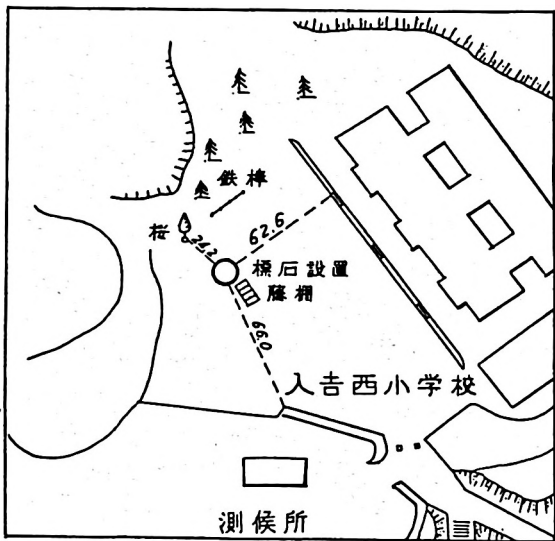
No. 117 Tomie 2
富江 2



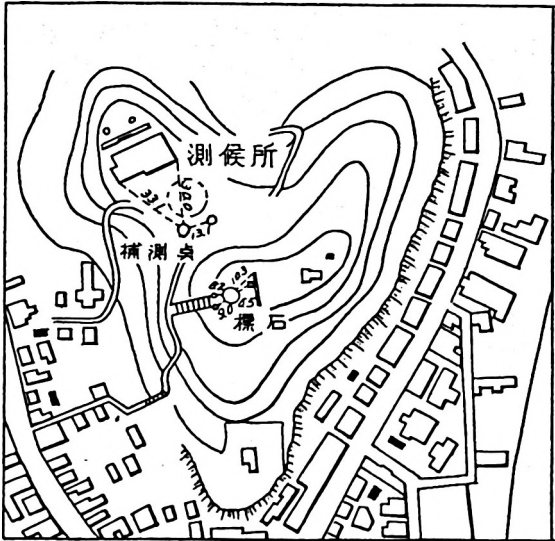
No. 118 Tomitaka
富高



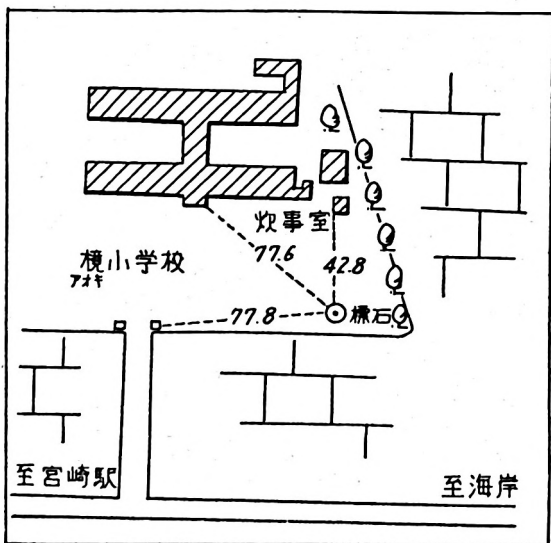
No. 119 Hitoyosi
人吉



No. 120 Usibuka
牛深

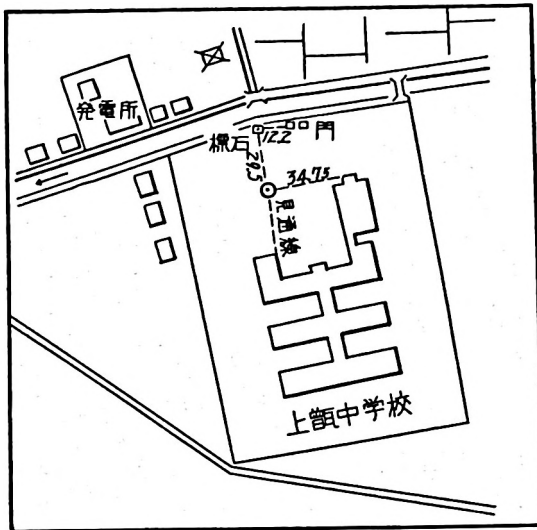


No. 121 Miyazaki
宮崎



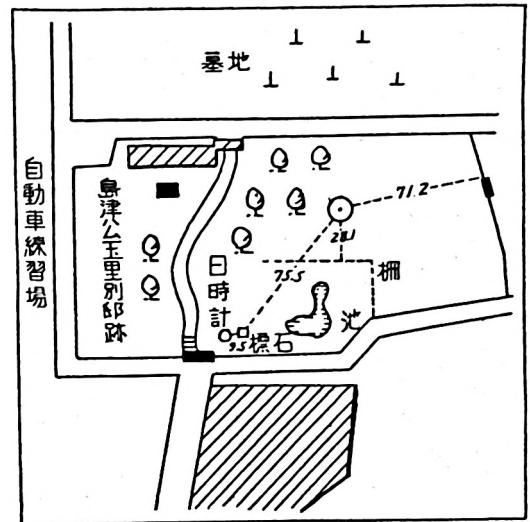
No. 122 Nakakosiki

中 甌



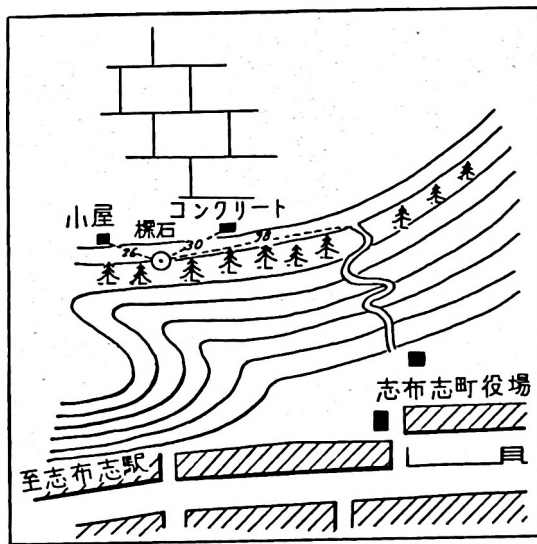
No. 123 Kagosima

鹿 児 島



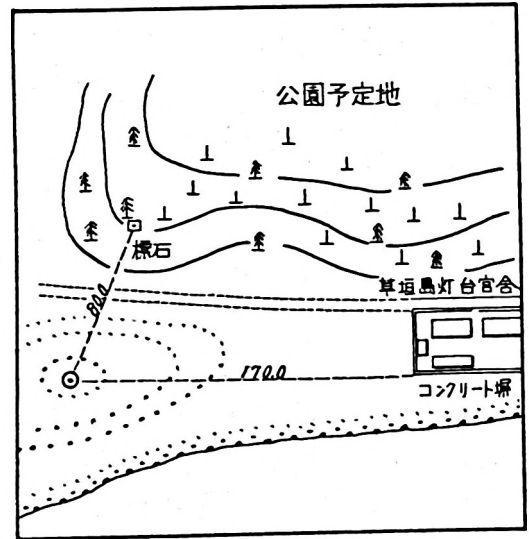
No. 124 Sibusi

志 布 志



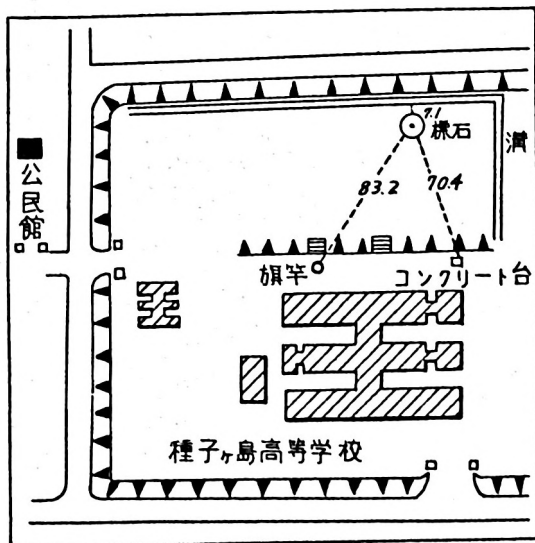
No. 125 Makurazaki

枕 崎



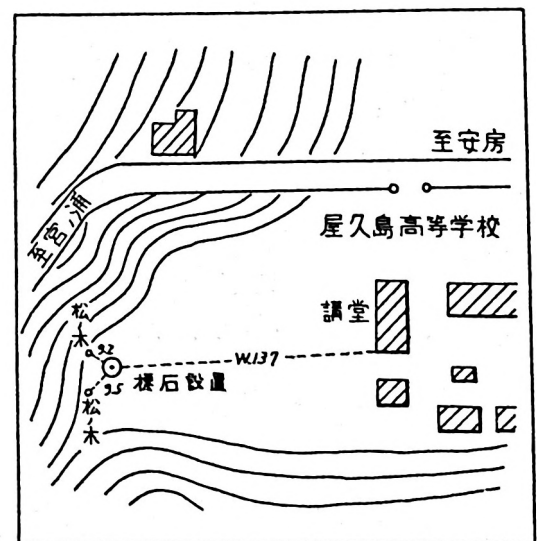
No. 126 Nisinomote

西 ノ 表

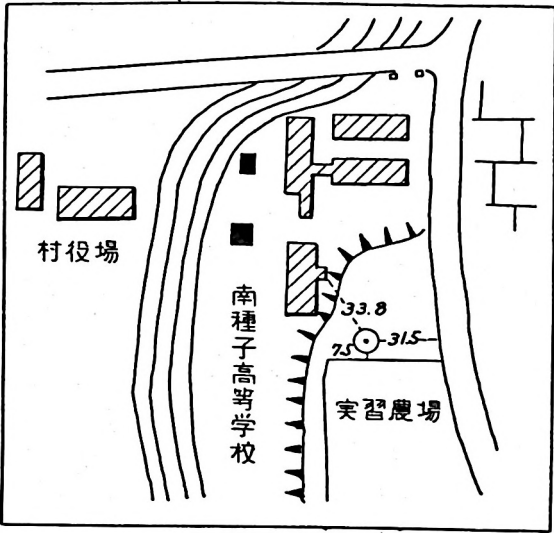


No. 127 Miyanoura

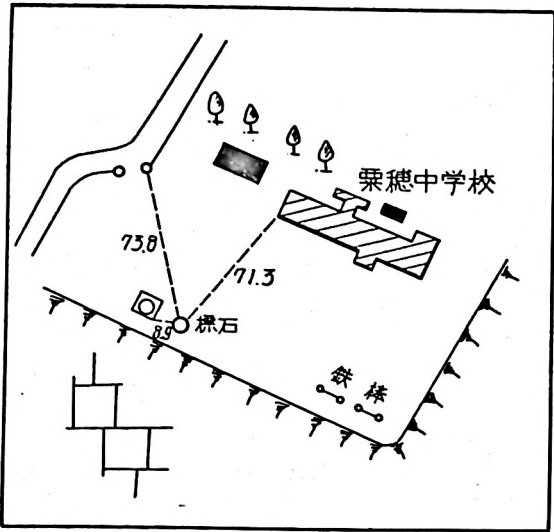
宮 ノ 浦



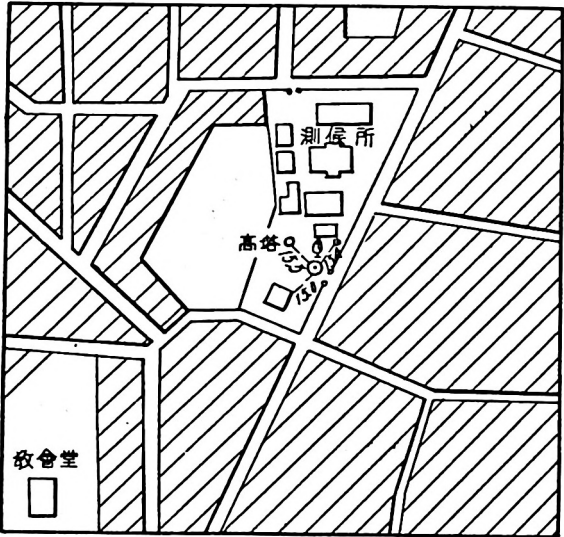
No. 128 Minamitane
南種子



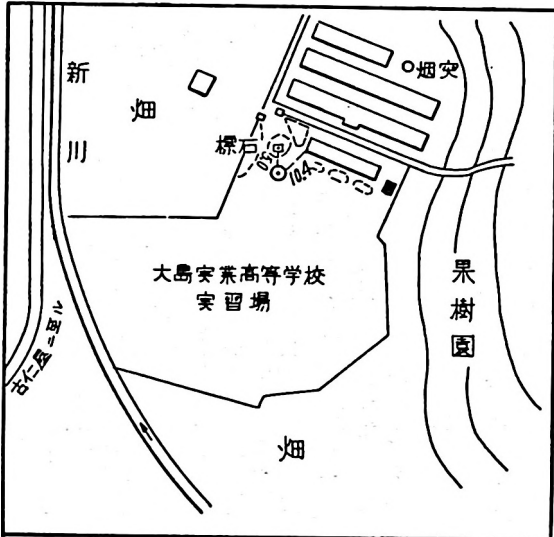
No. 129 Anbō
安房



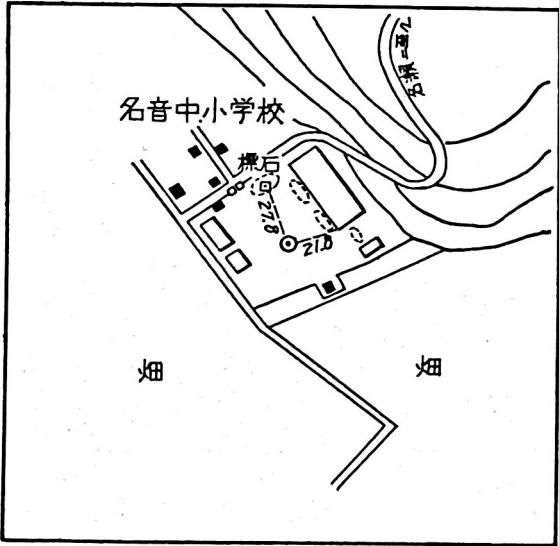
No. 130 Nase 1
名瀬1



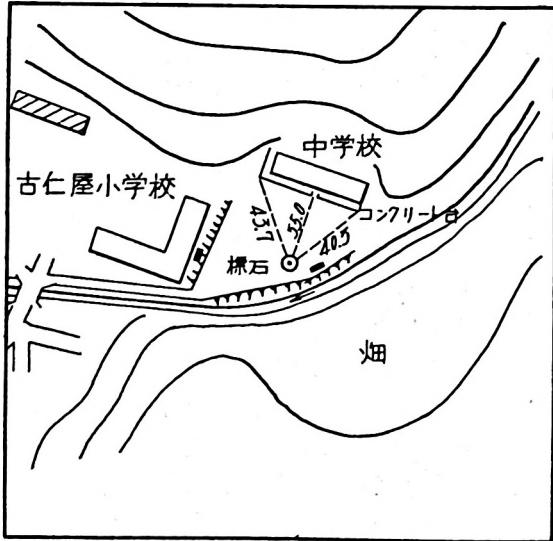
No. 131 Nase 2
名瀬2



No. 132 Naon
名音



No. 133 Koniya
古仁屋



昭和 36 年 2 月 18 日 印刷

昭和 36 年 2 月 25 日 発行

発 行 者

海 上 保 安 庁

東京都千代田区霞ヶ関 2 丁目 1 番地

編集兼印刷者

海 上 保 安 庁 水 路 部

東京都中央区築地 5 丁目

〔定 価 金 650 円〕

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